



**State of Minnesota  
Department of Finance**

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November 12, 1991

To: Legislative Commission on Planning  
and Fiscal Policy

Fr: John Gunyou *JG*  
Commissioner of Finance

Re: Northwest Airlines Financings

Enclosed, herewith, please find my report relating to the proposed issuance of State of Minnesota bonds to finance an aircraft maintenance base in Duluth and an engine repair facility in Hibbing.

Additionally, enclosed is a term sheet describing the present structure being considered for issuance of bonds by the Metropolitan Airports Commission.

**NWA MAINTENANCE & REPAIR FACILITIES**

**Report to the Legislature**

**Commissioner of Finance**

**State of Minnesota**

**November 1991**

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## **SECTION A**

### **Introduction**

The Laws of Minnesota, 1991, Chapter 350, authorize the Commissioner of Finance to issue and sell up to \$350 million in revenue bonds. The proceeds of the bonds are to be used to finance the costs related to the planning, construction, improvement or equipping of a heavy maintenance facility for aircraft and facilities subordinate and related to the facility to be located at the Duluth International Airport and for the planning, construction, improvement, or equipping of an aircraft engine repair facility to be located at the Chisholm-Hibbing municipal airport.

Chapter 350, Article 3, Section 2 requires that prior to the sale of state bonds, the Commissioner of Finance shall report to the Legislative Commission on Planning and Fiscal Policy.

The Commissioner of Finance and the Commissioner of Trade and Economic Development, representing the State of Minnesota, have been negotiating on behalf of the State with Northwest Airlines on the terms and conditions under which Northwest would lease from the State the heavy maintenance facility at Duluth and the engine repair facility at the Chisholm Hibbing Airport. On November 11, 1991, the State and Northwest reached an understanding on basic terms.

The information contained in this report is based upon the terms and conditions of this understanding, the requirements of state law, and the bond financing plans for the Duluth and the Chisholm Hibbing facilities. The bond financing plans are not yet complete. Further, the State, St. Louis County, the IRRRB, the City of Duluth, and Northwest Airlines have not reached final agreement on the financing plan. In addition, the financing plan will be subject to change based upon market conditions at the time the bonds are sold.

## **SECTION B**

### **Proposed Financing Commitments**

#### **Proposed State, Metropolitan and Local Government Financial Commitments**

**Duluth Maintenance Facility.** Chapter 350 authorizes the Commissioner of Finance to sell up to \$250 million of State revenue bonds for the Duluth Facility. The understanding with Northwest would result in the full \$250 million in revenue bonds being sold. The bonds would be sold in more than one series to provide cash flow as needed for the design and construction of the facility. Northwest Airlines expects to build this facility in two phases, with phase one starting immediately and the second phase beginning the third quarter of 1993.

The \$250 million of revenue bonds would be sold in four types:

1. \$125 million of bonds supported by a general obligation pledge of the State of Minnesota.
2. \$12.6 million of bonds supported by a general obligation pledge of St. Louis County.
3. \$64.8 million of First Mortgage Bonds supported only by the lease payments of Northwest Airlines.
4. \$47.6 million of bonds supported by the City of Duluth.

The first three types of bonds would first be supported from the lease payments by Northwest Airlines. In the event of a default by Northwest, the pledge of the State and St. Louis County would be drawn upon to make the payments of debt service to the holders of types 1 and 2 bonds. The type 3 bonds are secured only by the lease payments of Northwest.

The bonds supported by the City of Duluth would not be supported by the lease payments from Northwest. Duluth will be providing for the full debt service on the \$47.6 million of bonds primarily from: (1) tax increment generated by the facility and, if such increment is insufficient, tax increment available from certain other tax increment financing districts in Duluth; (2) Duluth sales taxes; (3) a payment in lieu of taxes based on 5 percent of certain Duluth utility revenues; (4) franchise fee payable by Minnesota Power and Light Company; and (5) any other funds selected by the City of Duluth.

The Duluth Facility will be mortgaged to the bond holders as collateral in the following priority.

1. The First Mortgage Bonds.
2. The bonds secured by the State general obligation pledge.
3. The bonds secured by the St. Louis County general obligation pledge.
4. The bonds supported by the City of Duluth.

Chapter 350, Article 1, Section 2, Subdivision 2(b) requires the Commissioner of Finance to include in the financing arrangements a 125 percent collateral coverage test for the bonds secured by the State's general obligation bond pledge. This test has been met by a pledge from Northwest Airlines to maintain at all times following completion sufficient collateral to meet the 125 percent coverage. As described in the term sheets, the state will initially be secured by a pledge of \$65 million in additional collateral for the Duluth Facility and \$35 million for the Hibbing Facility. This collateral will only be released when development is completed, or after five years, but only when the value of the facilities and any other pledged collateral are determined to support the 125 percent coverage test. The collateral test may be met in part by a participating lien on the MAC collateral pool to the extent required to satisfy the 125 percent test.

**Chisholm Hibbing Repair Facility.** Chapter 350 authorizes the Commissioner of Finance to sell up to \$100 million of State revenue bonds for the Chisholm Hibbing Facility. The agreement would result in the full \$100 million in revenue bonds being sold. The bonds would be sold in more than one series to provide cash flow as needed for the design and construction of the facility. Northwest Airlines expects to build this facility in one phase.

The \$100 million of revenue bonds would be sold in three types:

1. \$50 million of bonds supported by the general obligation pledge of the State of Minnesota.
2. \$15 million of bonds supported by St. Louis County.
3. \$35 million of bonds supported only by the lease payments of Northwest Airlines.

The three types of bonds would first be supported by the lease payments by Northwest Airlines. Upon a default by Northwest, the pledge of the State and St. Louis County would be drawn upon to make the payments of debt service to the bond holders. The type 3 bonds are secured for payment only by the lease payments of Northwest.

The total costs of the facility are expected to exceed the \$100 million maximum. Northwest Airlines is responsible for funding any costs in excess of available bond proceeds. If necessary, it is expected that the IRRRB will be the issuer of additional type 3 bonds, which will be supported only by the lease payments of Northwest and the mortgage.

As a financial incentive to Northwest Airlines to locate the engine repair facility at the Chisholm Hibbing Airport, the IRRRB, St. Louis County, the City of Hibbing and the City of Chisholm have reached an understanding to pay the first 18 months of lease payments on the facility or an equivalent amount of construction costs for Northwest. This will be accomplished with two sources of funds. First, the IRRRB will make a cash contribution of up to \$10 million. Second, a tax increment district will be established on the site of the facility and the incremental tax revenue will be used to pay the debt service on tax increment bonds having net proceeds of up to \$10 million. The proceeds of the tax increment bonds would be used in addition to the \$10 million contribution of IRRRB. The tax increment would be secured by general obligation pledges of St. Louis County, the City of Hibbing and the City of Chisholm.

The Chisholm Hibbing facility will be mortgaged to the bond holders in the following order:

1. The First Mortgage Bonds.
2. The bonds secured by the State general obligation pledge.
3. The bonds secured by the St. Louis County general obligation pledge.

Chapter 350, Article 1, Section 2, Subdivision 2(b) requires the Commissioner of Finance to include in the financing arrangements a 125 percent collateral coverage test for the bonds secured by the State's general obligation bond pledge. This test has been met by an initial collateral deposit and an on-going collateral pledge and other commitments by Northwest Airlines similar to that described for the Duluth Maintenance Facility.

## **Financial Assistance to be Provided**

**Duluth Maintenance Facility.** Most of the \$250 million of revenue bonds to be sold for the Duluth facility will qualify as tax exempt bonds under the federal tax code. The lower interest rate available on tax exempt bonding and as a result of a higher credit rating (except for the First Mortgage Bonds) will be passed on to Northwest in the form of lower lease payments. The difference between the cost of a tax exempt financing and a taxable financing represents a public subsidy. Based upon estimated interest rates and the proposed bond financing plan, the present value of this subsidy is estimated to be \$113 million.

Chapter 350, Article 1, Section 18, Subdivision 24 provides a credit for job creation at the Duluth facility. Based upon the 1000 minimum number of jobs guaranteed to be maintained by Northwest, and the salary levels of these jobs, the maximum credit available to Northwest is \$25 million.

Chapter 350, Article 1, Section 19 provides for an exemption from the sales tax for materials, equipment, and supplies used in the construction of the Duluth Facility. Based upon the estimates of the dollar amount of materials, equipment and supplies, the maximum amount of the sales tax credit available to Northwest Airlines is estimated at \$7 million.

**Chisholm Hibbing Repair Facility.** The \$100 million of revenue bonds to be sold for the Chisholm Hibbing facility will be sold as taxable bonds. Therefore, there is no tax-related interest differential subsidy as with the Duluth facility. However, since a portion of the bonds are supported by the state and St. Louis County, the interest rate will be lower than if the bonds were sold directly by Northwest. Based upon estimated interest rates and the proposed bond financing plan, the present value of this subsidy will be \$25 million.

Chapter 350, Article 1, Section 18, Subdivision 24 provides a credit for job creation at the Chisholm Hibbing facility. Based upon the 500 minimum number of jobs guaranteed to be maintained by Northwest, and the salary levels of these jobs, the maximum credit available to Northwest is \$12.5 million.

Chapter 350, Article 1, Section 19 provides for an exemption from the sales tax for materials, equipment, and supplies used in the construction of the Chisholm Hibbing facility. Based upon the estimates of the dollar amount of materials, equipment and supplies, the maximum amount of the sales tax credit is estimated at \$2 million.



## **SECTION C**

### **Detailed Description of the Projects and Facilities to be Financed by the Bonds**

**Duluth Maintenance Facility.** Northwest intends to establish a new maintenance base in Duluth, Minnesota able to perform heavy maintenance operations on third generation aircraft. The facility will perform cost effective heavy maintenance operations which will enable Northwest to be internationally competitive. The proposed project site of 228 acres, is located to the north of and adjoins the existing Duluth International Airport. It provides air side access for the proposed facility. Advanced planning for the facilities commenced in August 1991, and initial construction is scheduled to begin in early 1992. In order to meet Northwest Airlines' scheduled C & D maintenance checks for A340/330 and A320 series aircraft, phase one will provide hangar space for 3 aircraft by April 1, 1993. Additional hangar capacity is to be provided in phase two. The facility design will provide for future expansion of hangar space.

**Chisholm Hibbing Repair Facility.** Northwest intends to establish an engine maintenance facility in Hibbing designed to service 300 modern turbine engines annually, including the CFM 56 (General Electric) and PW 2000 and 4000 series engines (Pratt and Whitney). The facility will also be capable of servicing other engine types, and will meet the expected growth of the Northwest fleet of aircraft through the year 2000. The facility is expected to be operational by the spring of 1994. Ground breaking is anticipated in the spring of 1992.

## **SECTION D**

### **Proposed Loan, Lease and Revenue Agreements**

**Duluth Maintenance Facility.** Bond proceeds will be loaned to MAC on a non recourse basis. MAC will enter into a lease which will be assigned to secure the bonds. The major points of the lease agreement between the State and Northwest Airlines for the Duluth Facility are:

1. The facility will be owned by the Metropolitan Airports Commission (MAC) on land leased from Duluth pursuant to a long-term ground lease.
2. The facility will be leased by MAC to NWA (or an approved designee) pursuant to a lease (the "Lease") which, subject to tax code considerations requiring a term not exceeding 80 percent of the economic life of facilities financed with tax exempt bonds, will be coterminous with the original term of the latest maturing bonds (other than the Duluth-backed bonds described above).
3. Rent will be payable semiannually (subject to marketability of the bonds) in amounts sufficient, together with certain investment income from bond proceeds and rent payments, to pay when due all principal and interest on the State Guaranteed Bonds, County-backed Bonds and First Mortgage Bonds described below. Rent will be payable unconditionally after an initial construction period during which interest will be payable from proceeds of the bonds or investment income on bond proceeds. Additional rent will be payable to cover trustee and other actual bond administration costs.
4. An event of default and acceleration with respect to the LBO debt and, after retirement of the LBO debt, any indebtedness of Northwest in excess of \$500 million (major debt) shall constitute an event of default under the lease. All waivers and amendments with respect to such indebtedness shall be the sole discretion of the holders of such debt and shall be binding on the State. After retirement of the LBO debt and so long as no other major debt is outstanding, Northwest must maintain a tangible net worth (to be defined, taking into account market values of all assets, including rights in existing and ordered aircraft and international route authority, and parent debt guaranteed or secured by assets of Northwest) of \$1 billion.

5. All NWA transactions with affiliates must be fair, and fees to Alfred Checchi Associates will be subordinated to lease payments.
6. All dividends or other distributions by Northwest or its parent companies to major shareholders (other than for property or services provided, in-kind distributions and distributions payable pursuant to current contracts and arrangements which are approved by the State) must be made only from current earnings, unless either (i) the lease (or the lease of the Engine Repair Facility) is prepaid to the extent of 50% of such distributions (with credit against lease payments for reduced debt service from prepaying or defeasing bonds selected by the State), or (ii) a 125% operating cash flow to fixed charge coverage (which term shall be defined as mutually agreed) test for the preceding four calendar quarter period is satisfied. The 50% sharing will not be applied to any particular distribution at more than one level in the corporate structure.

**Chisholm Hibbing Repair Facility.** Bond proceeds will be loaned to MAC who will enter into a lease with Northwest which will be assigned to secure the bonds. The major points of the lease agreement between the State and Northwest Airlines for the Chisholm Hibbing facility are:

1. The facility will be owned by the Cities of Hibbing and Chisholm jointly or by the Airport Commission (collectively, the "Commission").
2. The facility will be leased by the Commission to NWA (or an approved designee) pursuant to a lease (the "Lease") which will be coterminous with the original term of the latest maturing bonds.
3. Rent will be payable semiannually (subject to marketability of the bonds) in amounts sufficient, together with certain investment income from bond proceeds and rent payments, to pay when due all principal and interest on the State Guaranteed Bonds, County-backed Bonds and First Mortgage Bonds described below. Rent will be payable unconditionally after an initial construction period during which interest will be payable from proceeds of the bonds or investment income on bond proceeds; provided that incentive amounts will be applied to pay the initial rent due following completion of the facility, unless NWA otherwise elects. Additional rent will also be payable by NWA to cover trustee and other actual bond administration costs.

4. An event of default and acceleration with respect to the LBO debt and, after retirement of the LBO debt, any indebtedness of Northwest in excess of \$500 million major debt) shall constitute an event of default under the lease. All waivers and amendments with respect to such indebtedness shall be the sole discretion of the holders of such debt and shall be binding on the State. After retirement of the LBO debt and so long as no other major debt is outstanding, Northwest must maintain a tangible net worth (to be defined, taking into account market values of all assets, including rights in existing and ordered aircraft and international route authority, and parent debt guaranteed or secured by assets of Northwest) of \$1 billion.
5. All NWA transactions with affiliates must be fair, and fees to Alfred Checchi Associates will be subordinated to lease payments.
6. All dividends or other distributions by Northwest or its parent companies to major shareholders (other than for property or services provided, in-kind distributions and distributions payable pursuant to current contracts and arrangements which are approved by the State) must be made only from current earnings, unless either (i) the lease (or the lease of the Duluth Facility) is prepaid to the extent of 50% of such distributions (with credit against lease payments for reduced debt service from prepaying or defeasing bonds selected by the State), or (ii) a 125% operating cash flow to fixed charge coverage (which term shall be defined as mutually agreed) test for the preceding four calendar quarter period is satisfied. The 50% sharing will not be applied to any particular distribution at more than one level in the corporate structure.



## **SECTION E**

### **Other Arrangements Related to State and Local Debt, Taxes, Financing and Debt Service**

**Duluth Maintenance Facility.** Additional financial arrangements include:

- o Local Bond issue (\$1,258,000). Used to finance infrastructure improvements.
- o Economic Development Authority Grant (\$2,102,000). Used to finance infrastructure improvements, airport and off-airport improvements.

**Chisholm Hibbing Repair Facility.** Additional financial arrangements include:

- o Local Bond issue (\$1,107,500). Used to finance infrastructure improvements, airport and off-airport improvements.
- o Economic Development Authority Grant (\$3,720,000). Used to finance infrastructure improvements, airport and off-airport improvements.
- o IRRRB Grant (\$500,000). Used to finance infrastructure improvements.
- o Federal Aviation Administration Grant (\$2,362,500). Used to finance airport and off-airport improvements.

## **SECTION F**

### **Estimates of Economic Activity, Air Traffic and Other Factors That Have Been Used in Assessing Prospective Financial Condition of the Lessee or Lessees and any Related Person**

Chapter 350, Article 1, Section 2, Subdivision 3 requires the Commissioner of Finance to review the financial condition of the lessee (Northwest). The Commissioner is required to exercise due diligence in the review. The Commissioner is also required to engage an independent, nationally recognized consultant having special expertise with the airline industry and its financing to prepare a written report on the financial condition of the lessee.

The Commissioner of Finance hired the Arvai Group as the airline expert to provide information to complete the due diligence as required in Chapter 350. The Arvai Group completed their work on the financial condition of Northwest Airlines and submitted their report to the Commissioner of Finance on September 23, 1991. A copy of the Arvai Report is included in Section L.

The major findings of the Arvai Report are:

1. With the proper terms and conditions, the proposed transaction appears to be a "win-win" situation for the State and Northwest Airlines.
2. This transaction, however, is not without financial risk, even though it is probable that Northwest will survive and continue to make lease payments on the facility.
3. Northwest is well positioned for future growth in the airline industry.
4. Northwest has built a qualified management team.
5. Aggressive strategies for improvement will guide Northwest in the next 5 years.
6. Northwest's ability to achieve its goals may be determined by forces beyond its control.
7. Northwest's strategies and programs are ambitious.

The Commissioners of Trade and Economic Development and Finance have reviewed the current prospective financial condition of the proposed lessee, Northwest, and its related companies up to the holding company level of Wings Inc., and have also reviewed the Arvai Report and its findings. Based upon these reviews, the Commissioners have concluded that there will be revenues at least sufficient during each year of the term of the proposed bonds to pay when due all financial obligations of the lessee under the terms of the proposed lease.

The Commissioner of Finance utilized the analysis of the Arvai Group on Economic Activity, Air Traffic and other factors in completing the due diligence requirement.

The Arvai Group's conclusion on Northwest's long term prospects and ability to make lease payments was:

"The proposed thirty year life of the bonds is too long a period over which to predict the financial future of an airline. Pan American World airways was the premier international flag carrier of the United States in 1961, and in a strong financial position. By 1991, thirty years later, it was in bankruptcy and had sold the majority of its international route structure.

Even in a worst case scenario, it appears clear to us that major portions of Northwest Airlines are likely to survive. Northwest has considerable value in its Asian routes, which, in a worst case, could be sold to a competitor or competitors. The implications of a worst case scenario on the utilization of the facilities in Duluth and Hibbing are impossible to predict.

On balance, our judgment is that Northwest Airlines is likely to survive, and be able to make lease payments on the proposed facilities."



MEMORANDUM  
OF  
UNDERSTANDING

MEMORANDUM OF UNDERSTANDING (this "Memorandum") dated November \_\_\_\_, 1991 among representatives of the State of Minnesota (the "State") Metropolitan Airports Commission (the "MAC") (collectively, the "Public Entities") and Northwest Airlines, Inc., a Minnesota corporation ("NAI").

Recitals:

A. The legislature of the State enacted legislation in May, 1991 as Chapter No. 350 authorizing certain financing for a heavy maintenance facility for aircraft and related facilities at the Duluth International Airport (the "Duluth Facility") and for an engine repair facility and related facilities at the Chisholm-Hibbing Municipal Airport (the "Hibbing Facility") (collectively, the "Facilities") which legislation was signed into law by the Governor of the State on May 30, 1991.

B. Representatives of the Public Entities and NAI have been discussing the terms of such financing within the requirements of such legislation and have reached agreement in principle with respect thereto.

C. Three term sheets (the "Term Sheets") outlining the principal terms and conditions of (1) the Duluth Facility financing, (2) the Hibbing Facility financing and (3) the MAC financing (collectively, the "Financings") have been negotiated and are attached to this Memorandum.

D. Representatives of the Public Entities and NAI wish to record their understandings in order to facilitate the prompt completion of documentation, financing and construction of the Facilities.

The parties to this Memorandum hereby express their understanding as follows:

1. The Term Sheets outline the principal terms and conditions of the Financings as they will be recommended for approval to the Governor, Metropolitan Airports Commission, Legislative Commission on Planning and Fiscal Policy, Iron Range Resources and Rehabilitation Board, Cities of Duluth, Hibbing and Chisholm, St. Louis County and any other entities required for the Financings.

2. Upon approval of the Term Sheets by the Metropolitan Airports Commission and Legislative Commission on Planning and Fiscal Policy, the parties will prepare final, definitive documentation consistent with the Term Sheets as approved. The parties will utilize their best efforts to see that the documentation is concluded, executed and approved by the Public Entities in definitive form and certain portions of the Financings made available to NAI on or before February 1, 1992.

3. It is understood that this Memorandum represents the understanding of the parties only and does not constitute a legally binding document.

COMMISSIONER OF FINANCE  
STATE OF MINNESOTA

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EXECUTIVE DIRECTOR  
METROPOLITAN AIRPORTS  
COMMISSION

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NORTHWEST AIRLINES, INC.

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Its \_\_\_\_\_

## **TERM SHEET**

### **DULUTH AIRCRAFT MAINTENANCE FACILITY**

Set forth are certain basic terms for issuing the bonds described below (the "Bonds") by the State of Minnesota (the "State") to finance the above-referenced facility (the "Facility") on behalf of Northwest Airlines, Inc. ("NAI"). Additional terms relating to an Engine Repair Facility in Hibbing, Minnesota are contained in a separate term sheet.

- PRECONDITION:** The State must receive satisfactory evidence there are no actual or probable breaches of financial or other covenants relating to NWA Inc. and NAI leveraged buyout debt ("LBO debt") or other debt. Accordingly, appropriate amendments must be made to loan documents for such debt.
- OWNERSHIP:** The Facility will be owned by the Metropolitan Airports Commission ("MAC") on land leased from Duluth pursuant to a long term ground lease.
- DESIGN AND CONSTRUCTION:** The Facility will be utilized to repair and maintain commercial aircraft; will consist of real and personal property (including new and used property); and will, upon completion and full operation, employ approximately 1,000 persons. The Facility will be designed and constructed as mutually agreed upon by MAC and NAI.
- CONSTRUCTION COSTS:** Costs of the Facility (including without limitation MAC's costs and expenses attributable to the Facility) will be funded from all proceeds of the Bonds not applied to fund costs of issuance, capitalized interest or reserves. NAI will be required to fund all costs in excess of available Bond proceeds, subject to the commitment of Duluth to issue additional revenue bonds to the extent authorized by law to finance all or a part of the excess costs. Funds will be loaned to MAC without recourse and disbursed in accordance with customary loan disbursing procedures. The State will require reasonable assurance that funds will be available to pay any expected costs in excess of available Bond proceeds.
- TERM:** The Facility will be leased by MAC to NAI (or an approved designee) pursuant to a lease (the "Lease") which, subject to tax code considerations requiring a term not exceeding 80% of the economic life of facilities financed with tax exempt bonds, will be coterminous with the original term of the latest maturing Bonds (other than the Duluth-Backed Bonds described below).

**RENT:**

Rent will be payable semiannually (subject to the marketability of the Bonds) in amounts sufficient, together with certain investment income from Bond proceeds and rent payments, to pay when due all principal and interest on the State Guaranteed Bonds, County-Backed Bonds and First Mortgage Bonds described below. Rent will be payable unconditionally after an initial construction period during which interest will be payable from proceeds of the Bonds or investment income on Bond proceeds. Additional rent will be payable to cover trustee and other actual bond administration costs.

**COVENANTS  
FOR STATE  
BENEFIT  
(CONTAINED IN  
LEASE OR  
SEPARATE  
AGREEMENT):**

Financial Statement Tests. An event of default and acceleration with respect to the LBO debt and, after retirement thereof, any indebtedness of NAI in excess of \$500 million (Major Debt) shall constitute an event of default under the Lease. All waivers and amendments with respect to such indebtedness shall be in the sole discretion of the holders of such debt and shall be binding on the State. After retirement of the LBO debt and so long as no other Major Debt is outstanding, NAI must maintain a "tangible net worth" (to be defined, taking into account market values of all assets, including rights in existing and ordered aircraft and international route authority, and parent debt guaranteed or secured by assets of NAI) of \$1 billion.

Transactions with Affiliates. All NAI transactions with affiliates must be fair, and fees to Alfred Checchi Associates will be subordinated to Lease payments.

Shareholder Distributions. All dividends or other distributions by NAI or its parent companies to major shareholders (other than for property or services provided, in-kind distributions and distributions payable pursuant to current contracts and arrangements which are approved by the State) must be made only from current earnings, unless either (i) the Lease (or the lease of the Engine Repair Facility described below) is prepaid to the extent of 50% of such distributions (with credit against Lease payments for reduced debt service from prepaying or defeasing Bonds selected by the State), or (ii) a 125% operating cash flow to fixed charge coverage (which term shall be defined as mutually agreed) test for the preceding four calendar quarter period is satisfied. The 50%

sharing will not be applied to any particular distribution at more than one level in the corporate structure.

Secondary Offering. Proceeds of any secondary offering of certain shareholders' stock in Wings Holdings Inc. would be treated as a shareholder distribution not made from current earnings as described and subject to the limitations above; provided that the secondary offering represents the initial public offering of such stock.

Jobs and Headquarters. NAI covenants and pledges:

(a) In order to satisfy the statutory requirement concerning the retention of employment, facilities and operations, it and its affiliates will employ personnel in the Minneapolis-St. Paul metropolitan area and the State of Minnesota at substantially the level that existed as of the date of the MAC Bonds;

(b) It will cause personnel to be employed at the Duluth and Hibbing Facilities, upon their respective completion and full operation, at substantially the following levels, respectively, 1,000 and 500 persons; and

(c) It will maintain its corporate headquarters in the Minneapolis-St. Paul metropolitan area.

The foregoing covenants shall not be deemed to prevent NAI or its affiliates:

(i) from moving particular categories of employment or the facilities or operations associated therewith (other than corporate headquarters) from Minnesota, provided the required employment levels are maintained; or

(ii) from reducing or changing its Minnesota employment, operations or facilities (other than the location of its corporate headquarters) in response to force majeure, business conditions, technological changes or statutory or regulatory changes; provided, to the extent not prohibited by applicable law and contractual obligations, NAI will use its best efforts to cause any such reductions or changes in Minnesota to be substantially proportional to the comparable reductions

or changes occurring elsewhere, taking into account the category and character of employment, facility or operation.

For purposes of the foregoing covenants:

(A) "Corporate headquarters" means the principal office of NAI from which its business is conducted and the principal office of the chief executive officer of NAI.

(B) "NAI" means Northwest Airlines, Inc. and any successor tenant under the Lease.

Noise Control. NAI shall agree with respect to noise abatement at the Minneapolis-St. Paul International Airport (the "Airport"), as follows:

(a) to consent to provide its proportionate share of air carrier funding for soundproofing, purchase assurance and other off-airport noise compatibility programs of not less than \$2,000,000 per year beginning in 1994 through termination of the existing scheduled air carrier use and lease agreement;

(b) to guarantee that it will accept delivery of not less than \$390,000,000 of Stage 3 aircraft in 1992;

(c) to limit the proportional utilization of Stage 2 aircraft at the Airport (calculated on an annualized basis) beginning in 1992 to be no more than the proportional utilization of Stage 2 aircraft throughout NAI's domestic system, and in addition not to increase the Stage 2 proportional utilization at the Airport in any year above the prior year's utilization, beginning in 1993; and

(d) to agree to an 11:00 p.m. to 6:00 a.m. curfew, for scheduled passenger flights of Stage 2 aircraft scheduled to arrive or depart during such time period.

Facility Partner. NAI will use its best efforts to obtain a "partner" with a strong financial base to share financial responsibility under the Lease.

Compliance Regarding Other Bonds. NAI shall comply with all provisions of leases or other agreements securing

payment of bonds issued pursuant to the Enabling Act (or in lieu thereof).

**ADDITIONAL  
LEASE  
PROVISIONS:**

**Tax Covenants.** Certain covenants will be required to maintain the tax-exempt status of applicable Bonds.

**Facility Damage or Condemnation.** Upon any material damage or condemnation of the Facility, proceeds from any insurance or condemnation award will be escrowed and NAI must apply such proceeds, together with other NAI funds if required, either (i) to restore or to replace the Facility or (ii) to pre-pay Lease payments sufficiently to prepay all Bonds. Rent will not be abated for Facility damage or condemnation until all Bonds are paid or defeased. NAI must maintain satisfactory insurance on the Facility.

**Facility Provisions.** The Lease will include customary provisions, subject to tax covenants, relating to (i) maintenance and use of the Facility; (ii) alteration of the Facility and substitution or removal of equipment; (iii) payment of all taxes, subject to escrowing if payments are contested; (iv) prohibitions on mortgages and encumbrances on the Facility; (v) unrestricted subletting; and (vi) installation, removal and encumbrance of equipment not financed by Bond proceeds.

**Maintenance of Existence.** NAI shall maintain its existence and not merge or sell substantially all of its assets unless (i) the resultant transferee or entity has at least substantially the same net worth as NAI, (ii) any new entity assumes all obligations of NAI under the Lease, and (iii) no defaults otherwise result from the transaction.

**REPORTING  
AND OTHER  
REQUIREMENTS:**

NAI, NWA Inc. and Wings Holdings Inc. shall provide current, quarterly and annual reports to the State modelled after reporting requirements under the federal Securities Exchange Act of 1934, together with reports evidencing compliance with required financial statement tests.

**LEASE  
DEFAULTS:**

The Lease will include customary events of default and remedies with, in certain instances, cure periods, as well as certain liquidated damages for breaches of certain covenants made for the benefit of the State.

**GUARANTIES:**

NWA Inc. and Wings Holdings Inc. will guarantee payment of the State Guaranteed Bonds, County-Backed Bonds and First Mortgage Bonds or, subject to its equivalence under bankruptcy laws, the Lease obligations with respect thereto.

**BOND SECURITY  
AND  
COLLATERAL:**

Assignment of Lease Payments. The State Guaranteed Bonds, County-Backed Bonds and First Mortgage Bonds will be secured by an assignment of rent payments under the Lease for the benefit of the Bondholders.

Mortgage. All Bonds will be secured by a mortgage (or security interest) on the entire Facility (excluding personal property not financed with Bond proceeds). Bonds will have the following priority of claims: first, the First Mortgage Bonds; then, the State Guaranteed Bonds; then, the County-Backed Bonds; and then, the Duluth-Backed Bonds.

Other Collateral. To secure its obligation to construct and pay the cost of the Facility and the Engine Repair Facility, including the issuance of the First Mortgage Bonds, and to provide additional security for the State-Guaranteed Bonds, NAI will pledge international routes having an appraised value of approximately \$65 million at the time of the issuance of the MAC Bonds. Subject to compliance with the 125% State Collateral Requirement, the \$65 million will be released upon the sooner of completion of the Facility or the end of five years.

Upon completion of the Facility, it will be appraised to determine its fair market value (recognizing, to the extent appropriate, the value of any third-party guaranty or security provided by a third-party partner or user of the Facility; provided, in either case, such third party is of investment grade). "Fair market value" shall mean the estimated amount at which the properties might be expected to exchange between a willing buyer and a willing seller, neither being under compulsion, each having reasonable knowledge of all relevant facts, with equity to both. NAI will deposit and thereafter maintain during the term of the State-Guaranteed Bonds additional collateral in the form of a second lien on the MAC collateral, international routes or parts in an amount which, with the appraisal value of the Facility, is sufficient to satisfy the 125% State Collateral Requirement. In valuing the second lien on the MAC Collateral, the value of the MAC Collateral shall be reduced by an amount equal to



100% of the principal amount of the MAC Bonds and the MAC loan to NAI secured thereby plus such additional amount as is required to provide for the defeasance of the MAC Bonds.

The Facility and all other real property collateral shall be appraised upon its initial deposit, including substitution, and each five years thereafter or at such other times as NAI shall elect. All other collateral property, tangible and intangible, shall be appraised upon initial deposit, including substitution, and every two years thereafter or at such other times as NAI shall elect. The appraisals shall be by a qualified independent appraiser selected by NAI and acceptable to the State, with NAI being responsible for appraisal costs. The MAC Collateral shall have the value assigned it from time to time pursuant to the MAC financing.

**DESCRIPTION OF  
BONDS:**

State Guaranteed Bonds. Up to \$125 million principal amount of revenue Bonds will be issued by the State, intended to be paid primarily from NAI Lease payments and interest on a reserve fund equal to 19 months' of Bond payments (the "State Guaranteed Bonds"). Such Bonds will be backed by the full faith and credit of the State if NAI fails to make adequate Lease payments for the State Guaranteed Bonds and the reserve fund is drawn on without timely restoration.

County-Backed Bonds. \$12.6 million principal amount of revenue Bonds (the "County-Backed Bonds") will be issued by the State, intended to be paid primarily from NAI Lease payments (and interest on any reserve fund required to secure a rating). Such Bonds will be backed by a pledge of the full faith and credit of St. Louis County to pay the Bonds.

First Mortgage Bonds. Up to \$64.8 million principal amount of revenue Bonds (the "First Mortgage Bonds") will be issued by the State, intended to be paid primarily from NAI Lease payments and interest on a reserve fund equal to 12 months of Bond payments (or 10% of the principal amount of the Bonds, if less). The First Mortgage Bonds will not constitute a debt of the State or any governmental authority.

Duluth-Backed Bonds. \$47.6 million principal amount of revenue Bonds will be issued by the State, intended to be paid in varying amounts primarily from (i) tax increment

generated by the Facility, and if such tax increment is insufficient, tax increment available from certain other tax increment financing districts in Duluth; (ii) Duluth sales taxes; (iii) a payment in lieu of taxes based on 5% of certain Duluth utility revenues; (iv) a franchise fee payable by Minnesota Power and Light Company; and (v) any other funds selected by Duluth. These Bonds will not be payable from NAI Lease payments and will not constitute a debt of the State. Subject to approval by the City of Duluth, surplus pledged revenues from the foregoing sources will be applied to the retirement of the other series of Bonds. With the approval of the State, an assessment agreement between Duluth and NAI will be entered into with respect to the Facility.

**ADDITIONAL  
BOND TERMS:**

Interest Rates. The Guaranteed Bonds and County-Backed Bonds will have fixed interest rates, with accrued interest paid no less than semiannually, unless otherwise determined by the State. The First Mortgage Bonds and Duluth-Backed Bonds shall have interest terms as shall be agreed upon by the State, NAI and, in the case of the Duluth-Backed Bonds, by Duluth. All interest rates will be market rates, unless otherwise determined by the State after consultation with NAI and, in the case of Duluth-Backed Bonds, Duluth.

Redemption. Bonds will be redeemable, at the option of the State, if NAI prepays Lease payments upon (i) the occurrence of certain damage or condemnation to the Facility, (ii) default by NAI under the Lease, (iii) tax-exempt Bonds becoming taxable, and (iv) otherwise as determined by the State, after consultation with NAI, based on prevailing conditions.

**TIMING AND  
SEQUENCE OF  
BONDS:**

The timing of Bond issuance will be based on the expected construction timetable and need for construction funds, with the first issue expected in 1992. The sequence of the Bonds will be as follows: first, the Duluth-Backed Bonds; second, the County-Backed Bonds; third, the State Guaranteed Bonds; and fourth, the First Mortgage Bonds; provided, however, the State, County and Duluth may agree that less than all of the Duluth-Backed Bonds or County-Backed Bonds may be issued after some of the State Guaranteed Bonds but not after the First Mortgage Bonds. To secure the issuance of the First Mortgage Bonds, NAI will pledge additional collateral as described above. If all Bonds are not required to be issued,

First Mortgage Bonds and State Guaranteed Bonds will be each proportionally reduced.

**MATURITY OF  
THE BONDS:**

The various Bonds will mature as determined by the State, after consultation with NAI, taking into consideration (i) the marketability of the various Bonds, (ii) the interest rate cost of the various Bonds, (iii) a desire to provide level Lease payments, (iv) a desire to provide a 30 year Lease with level or increasing debt service amortization subject to approval of NAI and the State, and (v) constitutional limitations on the maturity of the State Guaranteed Bonds, but to the extent possible the State will agree to refinance the Bonds in order to achieve item (iv) above.

**TAX STATUS  
OF BONDS:**

To the extent possible, all Bonds will be issued bearing interest excluded from gross income for federal income tax purposes.

**RATING OF  
BONDS:**

Except for the First Mortgage Bonds, all Bonds will be rated "A" or better (unless privately placed).

**SALE OF BONDS:**

The State presently expects that (i) the State Guaranteed and County-Backed Bonds will be competitively bid, (ii) the Duluth-Backed Bonds will be sold on a negotiated basis, and (iii) the First Mortgage Bonds will be privately placed.

**CONDITIONS TO  
ISSUANCE OF  
BONDS:**

All approvals, reports and opinions required by law or custom for issuance of both the Bonds and bonds authorized to be issued by MAC ("MAC Bonds") must occur (or, in the case of opinions, the State must receive satisfactory assurance that such opinions will be delivered). The State must have satisfactory assurance that (i) the foregoing Collateral Tests can be satisfied and maintained; (ii) all sources of funds for the Facility will be available; (iii) such funds will be sufficient to complete the Facility; (iv) all environmental and regulatory requirements with respect to construction and operation of the Facility will be met, and (v) the engine repair facility in Hibbing (the "Engine Repair Facility") will be constructed.

**CONDITIONS TO  
ISSUANCE OF  
MAC BONDS:**

The MAC financing agreement must obligate NAI to lease the Facility and the Engine Repair Facility and entitle MAC to accelerate the MAC Bonds upon a default by NAI.

**JOB TAX  
CREDITS:**

NAI will be entitled to tax credits authorized by the Enabling Act, provided that no credit shall be given for jobs which are transferred to the Facility from elsewhere in the State and not replaced.

**NO FURTHER  
ASSISTANCE:**

NAI shall acknowledge that, except for assistance authorized under the Enabling Act, NAI will not request further financial assistance from the State.

**RESTRICTIONS  
ON RENEGO-  
TIATION:**

NAI shall agree that no reductions or deferrals of payment due under the Lease shall be requested for any reason unless payments regarding all material NAI debt will be reduced or deferred on no more favorable terms.

**MISCELLANEOUS:**

Underwriter Selection. The State will determine the Underwriter(s) for all Bonds.

Extension of Lease. Extensions of the Lease (or a ground lease) are open for discussion, subject to tax requirements.

Duluth Issues. Matters as to the funding of off-site improvements and the application of certain Duluth revenues, if any, not required to pay Duluth-Backed Bonds must be resolved between NAI and Duluth prior to issuance of any Bonds or MAC Bonds.

Documentation. The form and terms and responsibility for preparation of all documentation shall be acceptable to NAI and the State.

Costs. All costs of issuance will be paid from Bond proceeds, subject to NAI and State approval.

**TERM SHEET  
HIBBING ENGINE REPAIR FACILITY**

Set forth are certain basic terms for issuing the bonds described below (the "Bonds") by the State of Minnesota (the "State") or the Office of the Commissioner of the Iron Range Resources and Rehabilitation Board ("IRRRB") to finance the above-referenced facility (the "Facility") on behalf of Northwest Airlines, Inc. ("NAI").

- PRECONDITION:** The State must receive satisfactory evidence there are no actual or probable breaches of financial or other covenants relating to NWA Inc. and NAI leveraged buyout debt ("LBO debt") or other debt. Accordingly, appropriate amendments must be made to loan documents for such debt.
- OWNERSHIP:** The Facility will be utilized to repair engines, engine components and/or electronic and mechanical components; will consist of real and personal property (including new and used property); and will, upon completion and full operation, employ approximately 500 persons. The Facility will be owned by the Cities of Hibbing and Chisholm jointly or by the Airport Commission (collectively, the "Commission").
- DESIGN AND CONSTRUCTION:** The Facility will be designed and constructed as mutually agreed upon by the IRRRB, the Metropolitan Airports Commission ("MAC") and NAI.
- CONSTRUCTION COSTS:** Costs of the Facility (including without limitation MAC's costs and expenses attributable to the Facility) will be funded from all proceeds of the Bonds not applied to fund costs of issuance, capitalized interest or reserves. NAI will be required to fund all costs in excess of available Bond proceeds (except to the extent NAI elects to apply the Incentive Amounts described below to pay such costs). Funds will be loaned to the Commission and disbursed in accordance with customary loan disbursing procedures. The State will require reasonable assurance that funds will be available to pay any expected costs in excess of available Bond proceeds. Subject to bond market conditions and legal authorization, however, the IRRRB will issue additional revenue bonds payable solely from payments under the Lease described below if total costs (including transaction costs and reserves) exceed \$100 million.

**INCENTIVE  
AMOUNTS:**

The "Incentive Amounts" will be (i) a grant from the IRRRB in the amount of \$10 million (the "IRRRB Grant") and (ii) proceeds from the sale of general obligation tax increment bonds of the City of Hibbing (also secured in part by full faith and credit pledges of Chisholm and St. Louis County) in an amount (not to exceed an amount sufficient to produce \$10 million of net proceeds) which, if permitted by the assessed value of the Facility, will be sufficient when added to the IRRRB Grant to pay the first 18 months of Lease payments following completion of the Facility. In the alternative, NAI may elect to receive a deferred return of taxes by means of recycled tax increment, resulting in the equivalent of partial tax abatement.

**TERM:**

The Facility will be leased by the Commission to NAI (or an approved designee) pursuant to a lease (the "Lease") which will be coterminous with the original term of the latest maturing Bonds.

**RENT:**

Rent will be payable semiannually (subject to the marketability of the Bonds) in amounts sufficient, together with certain investment income from Bond proceeds and rent payments, to pay when due all principal and interest on the State Guaranteed Bonds, County-Backed Bonds and First Mortgage Bonds described below. Rent will be payable unconditionally after an initial construction period during which interest will be payable from proceeds of the Bonds or investment income on Bond proceeds; provided that Incentive Amounts will be applied to pay the initial rent due following completion of the Facility, unless NAI otherwise elects. Additional rent will also be payable by NAI to cover trustee and other actual bond administration costs.

**COVENANTS  
FOR STATE  
BENEFIT  
(CONTAINED IN  
LEASE OR  
SEPARATE  
AGREEMENT):**

Financial Statement Tests. An event of default and acceleration with respect to the LBO debt and, after retirement thereof, any indebtedness of NAI in excess of \$500 million (Major Debt), shall constitute an event of default under the Lease. All waivers and amendments with respect to such indebtedness shall be in the sole discretion of the holders of such debt and shall be binding on the State. After retirement of the LBO debt and so long as no other Major Debt is outstanding, NAI must maintain a "tangible net worth" (to be defined, taking into account market values of all assets, including rights in existing and ordered aircraft and

international route authority, and parent debt guaranteed or secured by assets of NAI) of \$1 billion.

Transactions with Affiliates. All NAI transactions with affiliates must be fair, and fees to Alfred Checchi Associates will be subordinated to Lease payments.

Shareholder Distributions. All dividends or other distributions by NAI or its parent companies to major shareholders (other than for property or services provided, in-kind distributions and distributions payable pursuant to current contracts and arrangements which are approved by the State) must be made only from current earnings, unless (i) the Lease (or the lease of the Duluth Facility referenced below) is prepaid to the extent of 50% of such distributions (with credit against Lease payments for reduced debt service from prepaying or defeasing Bonds selected by the State), or (ii) a 125% operating cash flow to fixed charge coverage (which term shall be defined as mutually agreed) test for the preceding four calendar quarter period is satisfied. The 50% sharing will not be applied to any particular distribution at more than one level in the corporate structure.

Secondary Offering. Proceeds of any secondary offering of certain shareholders' stock in Wings Holdings Inc. would be treated as a shareholder distribution not made from current earnings as described and subject to the limitations above; provided that the secondary offering represents the initial public offering of such stock.

Jobs and Headquarters. NAI covenants and pledges:

Ⓐ In order to satisfy the statutory requirement concerning the retention of employment, facilities and operations, it and its affiliates will employ personnel in the Minneapolis-St. Paul metropolitan area and the State of Minnesota at substantially the level that existed as of the date of the MAC Bonds;

(b) It will cause personnel to be employed at the Duluth and Hibbing Facilities, upon their respective completion and full operation, at substantially the following levels, respectively, 1,000 and 500 persons; and

(c) It will maintain its corporate headquarters in the Minneapolis-St. Paul metropolitan area.

The foregoing covenants shall not be deemed to prevent NAI or its affiliates:

(i) from moving particular categories of employment or the facilities or operations associated therewith (other than corporate headquarters) from Minnesota, provided the required employment levels are maintained; or

(ii) from reducing or changing its Minnesota employment, operations or facilities (other than the location of its corporate headquarters) in response to force majeure, business conditions, technological changes or statutory or regulatory changes; provided, to the extent not prohibited by applicable law and contractual obligations, NAI will use its best efforts to cause any such reductions or changes in Minnesota to be substantially proportional to the comparable reductions or changes occurring elsewhere, taking into account the category and character of employment, facility or operation.

For purposes of the foregoing covenants:

(A) "Corporate headquarters" means the principal office of NAI from which its business is conducted and the principal office of the chief executive officer of NAI.

(B) "NAI" means Northwest Airlines, Inc. and any successor tenant under the Lease.

Noise Control. NAI shall agree with respect to noise abatement at the Minneapolis-St. Paul International Airport (the "Airport"), as follows:

(a) to consent to provide its proportionate share of air carrier funding for soundproofing, purchase assurance and other off-airport noise compatibility programs of not less than \$2,000,000 per year beginning in 1994 through termination of the existing scheduled air carrier use and lease agreement;

(b) to guarantee that it will accept delivery of not less than \$390,000,000 of Stage 3 aircraft in 1992;



(c) to limit the proportional utilization of Stage 2 aircraft at the Airport (calculated on an annualized basis) beginning in 1992 to be no more than the proportional utilization of Stage 2 aircraft throughout NAI's domestic system, and in addition not to increase the Stage 2 proportional utilization at the Airport in any year above the prior year's utilization, beginning in 1993; and

(d) to agree to an 11:00 p.m. to 6:00 a.m. curfew, for scheduled passenger flights of Stage 2 aircraft scheduled to arrive or depart during such time period.

Compliance Regarding Other Bonds. NAI shall comply with all provisions of leases or other agreements securing payment of bonds issued pursuant to the Enabling Act (or in lieu thereof).

ADDITIONAL  
LEASE  
PROVISIONS:

Facility Damage or Condemnation. Upon any material damage or condemnation of the Facility, proceeds from any insurance or condemnation award will be escrowed and NAI must apply such proceeds, together with other NAI funds if required, either (i) to restore or to replace the Facility or (ii) to prepay Lease payments sufficiently to prepay all Bonds. Rent will not be abated for Facility damage or condemnation until all Bonds are paid or defeased. NAI must maintain satisfactory insurance on the Facility.

Facility Provisions. The Lease will include customary provisions relating to (i) maintenance and use of the Facility; (ii) alteration of the Facility and substitution or removal of equipment; (iii) payment of all taxes, subject to escrowing if payments are contested; (iv) prohibitions on mortgages and encumbrances on the Facility; (v) unrestricted subletting (so long as the purpose of the Facility is maintained); and (vi) installation, removal and encumbrance of equipment not financed by Bond proceeds.

Maintenance of Existence. NAI shall maintain its existence and not merge or sell substantially all of its assets unless (i) the resultant transferee or entity has at least substantially the same net worth as NAI, (ii) any new entity assumes all obligations of NAI under the Lease, and (iii) no defaults otherwise result from the transaction.

**REPORTING  
AND OTHER  
REQUIREMENTS:**

NAI, NWA Inc. and Wings Holdings Inc. shall provide current, quarterly and annual reports to the State and IRRRB modelled after reporting requirements under the federal Securities Exchange Act of 1934, together with reports evidencing compliance with required financial statement tests.

**LEASE  
DEFAULTS:**

The Lease will include customary events of default and remedies with, in certain instances, cure periods, as well as certain liquidated damages for breaches of certain covenants made for the benefit of the State.

**GUARANTIES:**

NWA Inc. and Wings Holdings Inc. will guarantee payment of the State Guaranteed Bonds, County-Backed Bonds and First Mortgage Bonds or, subject to its equivalence under bankruptcy laws, the Lease obligations with respect thereto.

**BOND SECURITY  
AND  
COLLATERAL:**

Assignment of Lease Payments. All Bonds will be secured by an assignment of rent payments under the Lease for the benefit of the Bondholders.

Mortgage. All Bonds will be secured by a mortgage (or security interest) on the entire Facility (excluding personal property not financed with Bond proceeds). Bonds will have the following priority of claims: First, the First Mortgage Bonds; then, the State Guaranteed Bonds; and then, the County-Backed Bonds.

Other Collateral. To secure its obligation to construct and pay the cost of the Facility and the Duluth Facility, including the issuance of the First Mortgage Bonds, and to provide additional security for the State-Guaranteed Bonds, NAI will pledge international routes having an appraised value of approximately \$35 million at the time of the issuance of the MAC Bonds. Subject to compliance with the 125% State Collateral Requirement, the \$35 million will be released upon the sooner of completion of the Facility or the end of five years.

Upon completion of the Facility, it will be appraised to determine its fair market value (recognizing, to the extent appropriate, the value of any third-party guaranty or security provided by a third party partner or user of the Facility; provided, in either case, such third party is of investment

grade). "Fair market value" shall mean the estimated amount at which the properties might be expected to exchange between a willing buyer and a willing seller, neither being under compulsion, each having reasonable knowledge of all relevant facts, with equity to both. NAI will deposit and thereafter maintain during the term of the State-Guaranteed Bonds additional collateral in the form of a second lien on the MAC collateral, international routes or parts in an amount which, with the appraisal value of the Facility, is sufficient to satisfy the 125% State Collateral Requirement. In valuing the second lien on the MAC Collateral, the value of the MAC Collateral shall be reduced by an amount equal to 100% of the principal amount of the MAC Bonds and the MAC loan to NAI secured thereby plus such additional amount as is required to provide for the defeasance of the MAC Bonds.

The Facility and all other real property collateral shall be appraised upon its initial deposit, including substitution, and each five years thereafter or at such other times as NAI shall elect. All other collateral property, tangible and intangible, shall be appraised upon initial deposit, including substitution, and every two years thereafter or at such other times as NAI shall elect. The appraisals shall be by a qualified independent appraiser selected by NAI and acceptable to the State, with NAI being responsible for appraisal costs. The MAC Collateral shall have the value assigned it from time to time pursuant to the MAC financing.

**DESCRIPTION OF  
BONDS:**

State Guaranteed Bonds. Up to \$50 million principal amount of revenue Bonds will be issued by the State, intended to be paid primarily from NAI Lease payments and interest on a reserve fund equal to 19 months' of Bond payments (the "State Guaranteed Bonds"). Such Bonds will be backed by the full faith and credit of the State if NAI fails to make adequate Lease payments for the State Guaranteed Bonds and the reserve fund is drawn on without timely restoration.

County-Backed Bonds. \$15 million principal amount of revenue Bonds (the "County-Backed Bonds") will be issued by the State, intended to be paid primarily from NAI Lease payments (and interest on any reserve fund required to secure a rating). Such Bonds will be backed by a pledge of the full faith and credit of St. Louis County to pay the Bonds.

First Mortgage Bonds. Up to \$35 million (or more, if issued by the IRRRB) principal amount of revenue Bonds (the "First Mortgage Bonds") will be issued by either the State or the IRRRB. Such Bonds are intended to be paid primarily from NAI Lease payments and interest on a reserve fund equal to 12 months of Bond payments (or 10% of the principal amount of the Bonds, if less). The First Mortgage Bonds will not constitute a debt of the State, the IRRRB or any governmental authority.

**ADDITIONAL  
BOND TERMS:**

Interest Rates. The Guaranteed Bonds and County-Backed Bonds will have fixed interest rates, with accrued interest paid not less than semiannually, unless otherwise determined by the State. The First Mortgage Bonds shall have interest terms as shall be agreed upon by the State or IRRRB and NAI. All interest rates will be market rates, unless otherwise determined by the State after consultation with NAI.

Redemption. Bonds will be redeemable, at the option of the State, if NAI prepays Lease payments upon (i) the occurrence of certain damage or condemnation to the Facility, (ii) default by NAI under the Lease and (iii) otherwise as determined by the State, after consultation with NAI, based on prevailing conditions.

**TIMING AND  
SEQUENCE OF  
BONDS:**

The timing of Bond issuance will be based on the expected construction timetable and need for construction funds, with the first issue expected in the spring or summer of 1992. The sequence of the Bonds will be as follows: first, the County-Backed Bonds; second, the State Guaranteed Bonds; and third, the First Mortgage Bonds; provided, however, the State, County and the IRRRB may agree that less than all of the County-Backed Bonds may be issued after some of the State Guaranteed Bonds but not after the First Mortgage Bonds. To secure the issuance of the First Mortgage Bonds, NAI will pledge additional collateral as determined above. If all Bonds are not required to be issued, First Mortgage Bonds and State Guaranteed Bonds will be proportionally reduced.

**MATURITY OF  
THE BONDS:**

The various Bonds will mature as determined by the State, after consultation with NAI, taking into consideration (i) the marketability of the various Bonds, (ii) the interest rate cost of the various Bonds, (iii) a desire to provide level Lease

payments, (iv) a desire to provide a 30 year Lease with level or increasing debt service amortization subject to approval of NAI and the State, and (v) constitutional limitations on the maturity of the State Guaranteed Bonds, but to the extent possible the State will agree to refinance the Bonds in order to achieve item (iv) above.

**TAX STATUS  
OF BONDS:**

It is presently expected that interest on the Bonds will be taxable. However, to the extent possible, all Bonds will be issued bearing interest excluded from gross income for federal income tax purposes.

**RATING OF  
BONDS:**

Except for the First Mortgage Bonds, all Bonds will be rated "A" or better (unless privately placed).

**SALE OF BONDS:**

The State presently expects that the State Guaranteed and County-Backed Bonds will be competitively bid and that the First Mortgage Bonds will be privately placed.

**CONDITIONS TO  
ISSUANCE OF  
BONDS:**

All approvals, reports and opinions required by law or custom for issuance of both the Bonds and bonds authorized to be issued by MAC ("MAC Bonds") must occur (or, in the case of opinions, the State must receive satisfactory assurance that such opinions will be delivered). The State must have satisfactory assurance that (i) the Collateral Test can be satisfied and maintained; (ii) all sources of funds for the Facility will be available; (iii) such funds will be sufficient to complete the Facility; (iv) all environmental and regulatory requirements with respect to construction and operation of the Facility will be met; and (v) the aircraft maintenance facility in Duluth (the "Duluth Facility") will be constructed.

**CONDITIONS TO  
ISSUANCE OF  
MAC BONDS:**

The MAC financing agreement must obligate NAI to lease the Facility and the Duluth Facility and entitle MAC to accelerate the MAC Bonds upon a default by NAI.

**JOB TAX  
CREDITS:**

NAI will be entitled to tax credits authorized by the Enabling Act, provided that no credit shall be given for jobs which are transferred to the Facility from elsewhere in the State and not replaced.

**NO FURTHER  
ASSISTANCE:**

NAI shall acknowledge that, except for assistance related to the Bonds, NAI will not request further financial assistance from the State.

**RESTRICTIONS ON  
RENEGOTIATION:**

NAI shall agree that no reductions or deferrals of payments due under the Lease shall be requested for any reason unless payments regarding all material NAI debt will be reduced or deferred on no more favorable terms.

**ADDITIONAL  
ASSISTANCE  
FROM IRRRB:**

To induce economic development in the taconite tax relief area for which it has jurisdiction, the IRRRB shall cause a liquidity facility, acceptable to NAI, of \$15,000,000 to be provided to guarantee a loan to NAI of proceeds from revenue bonds of the MAC in the principal amount of up to \$79,000,000, amortized over a term of up to 15 years. Such MAC Bonds would be rated and payable solely from loan repayments of NAI, collateral (provided by NAI and maintained in an aggregate value of approximately 200% (or such lesser amount approved by the rating agencies) of outstanding bonds), a debt service reserve fund (funded from bond proceeds) and the liquidity facility. Deficiencies in amounts available for payment of the revenue bonds will be payable first from the reserve fund and then from the liquidity facility. NAI will pay or reimburse the costs of the liquidity facility and will provide the IRRRB collateral in the amount and of the type mutually agreeable to NAI and the IRRRB.

**MISCELLANEOUS:**

Underwriter Selection. The State will determine the Underwriter(s) for all Bonds.

Costs. All costs of issuance will be paid from Bond proceeds, subject to NAI and State approval.

Documentation. The form and terms and responsibility for preparation of all documentation shall be acceptable to NAI and the State.

# MEMORANDUM

Office of the Executive Director

TO: All Commissioners

FROM: Jeffrey W. Hamiel, Executive Director

SUBJECT: **NORTHWEST AIRLINES FINANCING RECOMMENDATION**

DATE: November 10, 1991

I am pleased to report that agreement has been reached between the representatives of MAC, Northwest Airlines and the State of Minnesota regarding the proposed financing transactions in Hibbing, Duluth and MSP and we are recommending this package for Commission consideration and approval.

As you know, we recognized from the outset that this financing was not a typical commercial lending request. However, MAC consented to consider the unique request by Northwest because of the significant economic impact that its operations and presence have on the region - not only the 1,500 new jobs in northern Minnesota and the 17,000 Twin Cities jobs Northwest presently affords, but also the economic effects of its hubbing operations, which have enabled the Twin Cities to exceed national averages in growth, location of large corporate headquarters, and indirect jobs created in the region.

Three Term Sheets outlining the principal terms and conditions of the financings are enclosed for your review and consideration, together with a Financial Analysis of Northwest Airlines prepared by Price Waterhouse.

In order to permit a complete airing of the issues presented by these transactions, the Chairman has scheduled a special meeting of the Commission at 1:00 p.m. on Friday, November 15 to consider the Price Waterhouse report, as well as a second meeting on Wednesday, November 20 at 1:00 p.m. to consider the recommended action. The regular November meeting will be held as planned on November 18.

Important details contained in the Term Sheets include the following:

1. G.O. Bonds. MAC would agree to issue \$270 million in general obligation revenue bonds, to be backed by a pledge of payment from Northwest. MAC would also loan Northwest up to \$45 million from its Special Construction Fund, to fund the debt

service reserve for the bonds. The proceeds of the bonds would be used to purchase or refinance various Northwest facilities, which will then be leased back to Northwest.

2. Collateral. Northwest would pledge collateral throughout the term of the agreements at least equal to 145% of the outstanding principal balance of the general obligation bonds and loan. If Northwest attains an investment grade rating on its senior unsecured debt, the collateral requirement may be reduced to 135%.

The specific initial collateral package is as follows:

NATCO	\$203 million
Parts	\$ 40 million
Airport Facilities	\$ 24.5 million (tentative)
International Routes	<u>\$208.8 million</u>
Total collateral package	\$476.3 million

Note that initial collateralization is 155% of the outstanding principal balance. "Parts" are McDonnell Douglas engine/aircraft parts. "Airport Facilities" are Buildings F, G, Sun Country Hangar and certain improvements to Buildings B, C and Gold Concourse (none of which were constructed or financed by MAC.) The Term Sheet contains specific procedures for periodic reappraisals and collateral substitution restrictions. The above values are based upon valuations from Airline Economics, Inc. and a review by Marquette Partners.

3. Revenue Bonds. MAC would also issue up to \$79 million in revenue bonds, to be backed by a pledge of lease payments from Northwest and a limited pledge from the Iron Range Resources and Rehabilitation Board. The pledge, in the form of a letter of credit, would be capped at \$15 million. The bonds would be further collateralized through a pledge of Northwest assets valued at 200% of the outstanding principal balance, but would not be backed by any MAC revenue pledge or other MAC commitment to repayment.

4. Covenants. Covenants contained in the MAC Term Sheet (many of which are also included in the Duluth and Hibbing Term Sheets) include: Parity with other lenders (MAC and State debt will have the benefit of the financial covenants provided to the Bankers Trust group and in subsequent major loans through cross-acceleration), Net Worth tests, Reporting Requirements, and Limitations on Transactions with Affiliates. All Northwest payments would be guaranteed by parent corporations NWA, Inc. and Wings Holding, Inc.



5. Linkage. The three Term Sheets are "linked" through cross-default provisions and limited cross-collateralization. In addition, we will not proceed with the MAC financing until leases have been executed for Duluth and Hibbing and either bonds are issued for those facilities or Northwest has pledged to MAC an additional \$100 million of collateral (international routes).

6. Headquarters and Employment Covenants. Northwest headquarters must remain in Minnesota. Current employment levels in the Twin Cities metropolitan area must be maintained at substantially current levels and employment in the Hibbing and Duluth facilities must equal at least 500 and 1,000 jobs, respectively, when facilities are complete. Employment levels may be reduced in the event of changed business conditions, strikes, or technological changes, provided that Northwest must use "best efforts" to cause any reductions in force to be substantially proportional throughout its system. (See MAC Term Sheet, Exhibit B.)

7. Noise Abatement Covenants. Northwest agrees to consent to increased air carrier funding for soundproofing programs at levels not less than \$2 million per year beginning in 1994. It has agreed to limit the proportional utilization of Stage 2 aircraft at MSP to no more than its systemwide use beginning in 1992, and not to increase Stage 2 utilization at MSP above the prior year's MSP utilization beginning in 1993. Finally, Northwest has contractually agreed to an 11 p.m. to 6 a.m. curfew for passenger flights of Stage 2 aircraft scheduled to arrive or depart during those time periods. (See MAC Term Sheet, Exhibit C.)

8. Facility Design and Development. The Duluth maintenance base would be owned by MAC on land leased from the City of Duluth and would be designed and constructed as mutually agreed upon by MAC and NWA. All costs of construction, including any of MAC's costs or expenses attributable to the facility, would be payable from bond proceeds. Details regarding construction of the Hibbing Repair Facility are not finalized, but the Hibbing Term Sheet provides that any MAC costs or expenses attributable to the facility would be reimbursed.

9. Price Waterhouse Report. As previously noted, the Price Waterhouse Report will be the subject of a Special Commission briefing on November 15. Most important, however, is Price Waterhouse's conclusion that assuming the occurrence of certain specified conditions and achievement of certain results, "the future financial condition of the Company should allow Northwest to continue to meet its financial obligations over the remaining period of the Financing." While Price Waterhouse believes there may be "substantial risk" associated with the financings, it notes that the risks can be partially mitigated through an appropriate combination of collateral, financial covenants and

repayment provisions. It is staff's view that we have met these conditions in the negotiations.

10. Other Required Approvals. The MAC bonds would only be issued after approval by the Legislative Commission on Planning and Fiscal Policy and State Commissioner of Finance. In addition, the proposal is made subject to receipt of written assurance that the transactions are consistent with federal grant assurances.

11. Miscellaneous. Two housekeeping items need to be addressed. First, we were advised last month that Mr. Kent Richey, who has represented the State throughout these transactions, has left the Leonard, Street and Deinard law firm and joined Faegre and Benson, which has been representing MAC as bond counsel. I do not believe that the potential conflict of interest created by this situation is sufficiently great to object to the arrangement and propose to consent as requested.

Second, a "side letter" from Northwest proposes that the consultant fee arrangement be modified so that in the event bonds are not issued Northwest's agreement to pay consultants is limited to fifty percent of the fees incurred between November 11 and the date of final approval of the Term Sheets by the Legislative Commission. In the event bonds are issued, all fees would be paid from bond proceeds subject to approval by Northwest. Staff has reviewed this arrangement and finds the proposal acceptable; in the event bonds are not issued, staff will treat consultants costs as administrative support charged to the appropriate Commission cost centers.

COMMISSION ACTION REQUESTED:

1. ADOPTION OF THE TERM SHEETS OUTLINING THE PRINCIPAL TERMS AND CONDITIONS OF THE DULUTH FACILITY FINANCING, HIBBING FACILITY FINANCING AND MAC FINANCING;
2. REQUEST THAT THE LEGISLATIVE COMMISSION ON PLANNING AND FISCAL POLICY AND MINNESOTA COMMISSIONER OF FINANCE APPROVE ISSUANCE OF BONDS AUTHORIZED BY LAWS 1991, CHAPTER 350; AND
3. DIRECT STAFF AND COMMISSION CONSULTANTS TO PREPARE FINAL, DEFINITIVE DOCUMENTATION CONSISTENT WITH THE TERM SHEETS AS APPROVED AND USE BEST EFFORTS TO SEE THAT DOCUMENTATION IS CONCLUDED, EXECUTED AND PRESENTED FOR FINAL COMMISSION APPROVAL IN DEFINITIVE FORM SO THAT PORTIONS OF THE FINANCINGS MAY BE MADE AVAILABLE TO NORTHWEST ON OR BEFORE FEBRUARY 1, 1992.

JWH/TWA/wjb  
Enclosures  
COMM1.MEM

## TERM SHEET

### METROPOLITAN AIRPORTS COMMISSION FINANCING

NOVEMBER 8, 1991

#### I. INTRODUCTION.

This Term Sheet summarizes the proposal of the Metropolitan Airports Commission ("MAC") to make available approximately \$390 Million of financing to Northwest Airlines, Inc. ("NAI"). The Term Sheet is organized by reference to the two types of financing authorized by the enabling legislation--the General Obligation Bonds and the Revenue Bonds (sometimes hereinafter collectively referred as "Financing"). The Proposal set forth in this Term Sheet is a result of numerous discussions which have occurred during the past several months among MAC, consultants of MAC, and NAI.

It should be emphasized that this Term Sheet constitutes the current thinking of MAC consultants and MAC staff with respect to the Financing. The Term Sheet has not yet been presented to, or approved by, the Commissioners of MAC.

For purposes of this Term Sheet, references to NAI include NAI and its affiliates. Capitalized terms used in this Term Sheet and not otherwise defined shall have the meaning set forth in Exhibit A.

#### II. GENERAL OBLIGATION REVENUE BOND FINANCING.

##### A. GO Bond Terms.

1. General. Subject to compliance with the requirements of this Term Sheet, the GO Bonds will be issued in one or more series in a principal amount of \$270,000,000. The proceeds of the GO Bonds will be principally utilized (i) to purchase GO Facilities from NAI or NAI affiliates (which facilities will then be leased back to NAI pursuant to GO Leases), and (ii) to refinance certain GO Facilities pursuant to a purchase of NAI's leasehold interests in certain facilities together with a lease back of such facilities to NAI under GO Leases (for the same terms as the original leaseholds) and/or pursuant to GO Loans.

The principal amount of the GO Bonds applied to so purchase or refinance the GO Facilities may not exceed 85 percent of the fair market value of the GO Facilities as determined by GO Appraisal.

2. Term. Each series of GO Bonds will mature over a term of approximately 30 years. It is expected that most of the principal on the GO Bonds will be scheduled to mature later than most of the principal on the Revenue Bonds, and the MAC Loan to achieve a level overall debt service schedule to the extent reasonably possible consistent with the other terms and conditions hereof. Principal on the GO Bonds will be payable annually (or more frequently if acceptable to MAC and NAI), either through serial maturities or sinking fund redemptions.
3. Rate. The GO Bonds will be issued as taxable fixed-rate instruments provided that with the approval of NAI and MAC and upon terms acceptable to MAC, a portion of the GO Bonds may be issued as variable rate instruments for all or part of the term. The GO Bonds will bear interest payable semi-annually or at such other times as acceptable to NAI and MAC.

4. Redemption. GO Bonds are subject to redemption at the option of MAC and NAI under certain circumstances at par plus a market premium. GO Bonds are subject to extraordinary redemption at the option of MAC at par or at par plus a market premium under certain specified circumstances.

5. Security. The obligations of NAI on the GO Leases and GO Loans shall be secured by GO Mortgages given by NAI on the GO Facilities and such other collateral as is necessary to meet the GO Collateral Requirement.

The GO Bonds will be secured by the general obligation pledge of MAC. If recommended by the Underwriters and if acceptable to MAC and NAI, the GO Bonds may also be secured by (i) a pledge of the net rental income under the GO Leases, (ii) a pledge of debt service payments on the GO Loans, and (iii) a pledge of the GO Mortgages. The GO Leases will be triple-net leases. The quarterly GO Lease rental payments and the quarterly GO Loan debt service payments will be in a combined amount sufficient to pay debt service on the GO Bonds.

6. Reserve Requirement. The reserve requirement shall be the amount authorized under MAC's enabling legislation (i.e., approximately equal to the debt service on the GO Bonds in the next following 27 months (the "GO Reserve Requirement")).

7. MAC Loan. Concurrently with the issuance of the GO Bonds, MAC will loan to NAI an amount sufficient to (i) fund initially the GO Reserve Requirement and (ii) pay the costs of issuance in connection with the GO Bonds and other costs related thereto (hereinafter "MAC Loan"). The purpose of the MAC Loan is to assure that, to the fullest extent possible, the entire \$270,000,000.00 of gross GO Bond proceeds will be available to purchase or refinance GO Facilities as more fully described in Paragraph II(A)(8) below. The MAC Loan will be in an amount of between \$35,000,000.00 and \$45,000,000.00 and will be repaid over the twenty year period immediately following the making of the MAC Loan in equal quarterly payments based on a twenty-year amortization at an interest rate equal to the interest rate on the GO Bonds. The obligations of NAI on the MAC Loan shall be secured by GO Mortgages given by NAI on such collateral as is necessary to meet the GO Collateral Requirement. In connection with the closing of the MAC Loan, NAI shall deliver to MAC the MAC Loan documents ("MAC Loan Documents"). The MAC Loan Documents shall include, without limitation, a promissory note and shall contain the terms and conditions pertaining to GO Leases described below in Paragraph II(D). Further, NAI shall execute and deliver a mortgage in favor of MAC securing repayment of the MAC Loan in form and content satisfactory to MAC and shall pay all costs, including mortgage registration tax, in connection therewith.

8. Use of Bond Proceeds. The bond proceeds will be utilized to purchase or refinance GO Facilities, resulting in the creation of GO Leases and GO Loans, as described in Paragraph (II)(A)(1) above.

B. GO Bonds Resolution.

The GO Bonds will be authorized and issued and the security provisions with respect thereto will be provided for pursuant to a GO Bonds Resolution to be adopted by MAC pursuant to applicable statutory authority. The GO Bonds Resolution will pledge the full faith and credit and unlimited taxing power of MAC to the repayment of the GO Bonds and, if applicable, will

pledge and provide for the segregation and appropriation of the net rental income derived from the GO Leases and the debt service from the GO Loans to the payment of the GO Bonds on a parity with MAC's outstanding general obligation revenue bonds. The GO Bonds Resolution will also provide for the terms and conditions upon which the GO Bonds may be redeemed and additional bonds may be issued. If MAC so desires, NAI will enter into an indenture of trust or collateral administration agreement with respect to the GO Mortgaged Property pursuant to which a trust company will act as a fiduciary for MAC to hold and administer the GO Mortgaged Property and to assure compliance with the GO Mortgage provisions.

C. GO Facilities Purchase Agreement.

1. Purchase Agreement. MAC will acquire the GO Facilities for cash, pursuant to a sale-leaseback arrangement. The purchase agreements pursuant to which these GO Facilities will be acquired by MAC shall contain terms acceptable to MAC concerning title, closing documents, representations and warranties (including without limitation suitable environmental representations and warranties), and other such matters as are customarily addressed in purchase agreements for similar assets. Pursuant to the enabling legislation, the purchase price may not exceed 85% of the fair market value of the GO facilities being acquired as determined by the GO Appraisal.

D. GO Leases.

1. General Terms. The GO Facilities will be leased to NAI (or a third party acceptable to MAC) pursuant to the GO Leases. To the extent NAI is not the lessee under a GO Lease, NAI will guaranty the performance of the lessee's obligations thereunder. Any GO Leases relating to the Airport Facilities (other than Airport Facilities owned by NAI) shall be true leases. At the option of NAI and on terms acceptable to MAC, any GO Leases relating to the NATCO Facility and Airport Facilities owned by NAI may be either true leases or financing leases for tax purposes pursuant to which NAI will have the option to purchase the leased facilities for a nominal or other mutually agreeable consideration upon expiration of the lease term and retirement of the GO Bonds issued with respect thereto. If NAI elects to structure such leases as financing leases, then NAI shall execute mortgages in form and content satisfactory to MAC and shall pay all costs, including mortgage registration tax, in connection therewith. The foregoing provisions of this Paragraph relating to structuring GO Leases on Airport Facilities owned by NAI as financing leases are subject to the need to fully preserve and retain the rights and benefits of MAC under existing leases on such Airport Facilities and do not constitute in any way a commitment on the part of MAC to revise the provisions of or extend the terms of such existing leases. NAI will have the right to direct MAC to exercise any option or options MAC may have to call the GO Bonds for redemption under certain circumstances; provided NAI provides sufficient funds to pay the redemption price. The GO Leases will terminate or be subject to termination at NAI's option upon retirement or defeasance of the GO Bonds. NAI may elect at any time to prepay the GO Bonds in accordance with their terms or cause them to be defeased by depositing cash or securities with MAC in an amount acceptable to MAC. MAC shall be the lessor under all GO Leases.

2. Payment Obligations. The GO Leases will be triple-net leases whereby NAI will be obligated to pay all costs of operation and maintenance with respect to the GO Facilities leased thereby and pay additional quarterly net rentals sufficient, when aggregated with quarterly debt service payments on the GO Loans and with interest income and amounts deposited to meet the GO Reserve Requirement and other trusteed funds, to pay the debt service on the GO Bonds issued with respect thereto as such debt service payments come due. If acquired as GO Facilities, ground rents currently payable by NAI to MAC on the Airport Facilities and base rents currently payable by NAI to MAC with respect to Buildings B, C and the Gold Concourse shall not be included in determining the level of additional revenues required from NAI (whether from additional rents on the GO Leases or debt service on the GO Loans) to pay the debt service on the GO Bonds. All fees to Alfred Checchi & Associates shall be subordinated to payment obligations under the GO Leases GO Loans. All obligations of NAI or NAI affiliates under the GO Leases and GO Loans shall be guaranteed by NAI parent and subsidiary affiliates, including, without limitation, NWA, Inc. and Wings Holdings, Inc. In addition, the GO Leases and GO Loans shall provide that NAI shall maintain its existence and not merge or sell substantially all of its assets unless (i) the resultant transferee or entity has at least substantially the same net worth as NAI, (ii) any new entity assumes all obligations of NAI under the GO Leases and GO Loans and (iii) no defaults otherwise result from the transaction. Liquidated damages will be payable for a breach of certain covenants made for the benefit of MAC.
3. Other Provisions. MAC and NAI will have rights and obligations consistent with customary sale-leaseback transactions.
4. Public Policy Covenants.
  - (i) Linkage. MAC will agree to issue the GO Bonds upon (a) compliance with the terms and conditions of this Term Sheet, (b) execution of leases (or commitments with respect thereto acceptable to MAC) relating to the bonds ("State Bonds") to be issued by the State of Minnesota ("State") to finance the Airbus Maintenance Facility in Duluth ("Airbus Maintenance Facility") and the Engine Repair Facility in Hibbing ("Engine Repair Facility") pursuant to the Duluth Term Sheet and Hibbing Term Sheet, respectively, (c) the pledge by NAI to MAC of the \$100 million of international routes ("State Collateral") referenced in the Duluth Term Sheet and the Hibbing Term Sheet (\$65 million with respect to Duluth and \$35 million with respect to Hibbing) on terms and conditions acceptable to MAC if no portion of State Bonds has then been issued (it being agreed that MAC will subordinate its first lien position in the Additional Collateral at such time as the State Bonds are issued), (d) finalization between MAC and the State of an appropriate Intercreditor Agreement relating to the second position of the State on certain of the GO Mortgages, and (e) the receipt by MAC of written assurances acceptable to MAC that the effectuation of the Financing will not adversely affect existing or future federal airport funding sources. All NAI obligations relating to the GO Bonds, including without limitation GO Leases, GO Loans, the MAC Loan and related security documentation, shall be (a) cross-defaulted with the NAI obligations to the State of Minnesota relating to the Airbus Maintenance Facility and

the Engine Repair Facility and (b) for so long as the State of Minnesota maintains a subordinate lien on the GO Mortgaged Property (as more fully described in Paragraph II(E)(5) hereof), further secured by a second lien on the collateral granted by NAI to the State to secure repayment of the NAI obligations relating to such facilities. In the event the Airbus Maintenance Facility or the Engine Repair Facility are not undertaken and completed, then such event shall constitute a default under the GO Leases and GO Loans and related documents.

- (ii) Headquarters and Employment. NAI shall deliver the headquarters and employment covenant attached hereto as Exhibit B.
  - (iii) Noise Abatement. NAI shall deliver the noise abatement covenant attached hereto as Exhibit C.
  - (iv) Financial Requirements and Covenants. An event of default and acceleration with respect to the NAI leveraged buyout debt with Bankers Trust ("BT Debt") and after retirement thereof with respect to any indebtedness of NAI in excess of \$500,000,000. ("Major Debt") shall constitute an event of default under the GO Leases and GO Loans. All waivers and amendments with respect to such indebtedness shall be in the sole discretion of the holders of such debt and shall be binding on MAC. After retirement of the BT Debt and so long as no other Major Debt is outstanding, NAI must maintain a "tangible net worth" (to be defined, taking into account market values of all assets, including rights in existing and ordered aircraft and international route authority, and parent debt guaranteed or secured by assets of NAI) of \$1,000,000,000. In addition, NAI, NWA and Wings Holdings, Inc. shall provide current, quarterly and annual reports to MAC modeled after reporting requirements under the Securities Exchange Act of 1934, together with reports evidencing compliance with required financial statement tests. Prior to the issuance of the GO Bonds, NAI shall have obtained a waiver or modification from Bankers Trust concerning the financial covenants associated with the BT Debt that NAI is not currently meeting or is not expected to meet.
5. GO Loans. To the extent that any Airport Facility is refinanced in whole or in part pursuant to a GO Loan, then NAI will deliver to MAC GO Loan documents ("GO Loan Documents") with respect to such Airport Facility in lieu of or in addition to a GO Lease. The GO Loan Documents shall include, without limitation, a promissory note and/or a revenue agreement and shall contain the terms and conditions pertaining to GO Leases described above in this Paragraph II(D). Further, NAI shall execute and deliver a mortgage on such Airport Facility in form and content satisfactory to MAC and shall pay all costs, including mortgage registration tax, in connection therewith.

E. GO Mortgages.

1. GO Mortgaged Property. The GO Mortgages will create a first mortgage lien on and security interest in the GO Mortgaged Property. The GO Mortgaged Property

will have an Appraised Value in compliance with the GO Collateral Requirement at all times. The GO Mortgaged Property will include some or all of the following: (i) portions of NATCO Facility acquired with the proceeds of the GO Bonds (to be valued at fair market value on an asset-by-asset basis and not on a going concern basis); (ii) Airport Facilities consisting of Buildings F, Building G and the Sun Country Hangar to the extent acquired with the proceeds of the GO Bonds; (iii) international routes; and (iv) spare aircraft and engine parts. All GO Mortgaged Property shall be subject to MAC approval. The initial package of the GO Mortgaged Property and other terms and conditions relating to the GO Mortgaged Property are set forth on Exhibit D attached hereto and are incorporated into this Term Sheet by reference.

2. General Covenants. The GO Mortgages will contain customary covenants with respect to (i) the maintenance of the GO Mortgaged Property in appropriate condition and working order, (ii) property and liability insurance, (iii) the payment of all costs and claims with respect to the GO Mortgaged Property, including taxes and other government assessments and charges, (iv) the observation of all applicable laws and regulations, including without limitation, environmental laws and regulations, and (v) prevention and removal of all liens thereon other than the lien of the GO Mortgages and other permitted encumbrances agreed to by MAC.
3. Collateral Evaluation and Maintenance of Collateral Value. The GO Mortgaged Property will be appraised by the Appraisers pursuant to a GO Appraisal prior to the issuance of the GO Bonds and thereafter as herein provided:
  - (i) The real property constituting the GO Mortgaged Property will be appraised prior to issuance of the GO Bonds or prior to its date of substitution (if such substitution is approved by MAC) and thereafter every three years; provided, however, that NAI and MAC shall each have two additional options to appraise the real property at such time over the term of the GO Bonds as they, in their discretion, may determine.
  - (ii) The personal property constituting the original GO Mortgaged Property will be appraised prior to the issuance of the GO Bonds and bi-annually thereafter as of every second anniversary date of the GO Bonds; provided, however, that NAI and MAC shall each have two additional options to appraise the personal property at such time over the term of the GO Bonds as they, in their discretion, may determine. Personal property substituted for other GO Mortgaged Property (if such substitution is approved by MAC) shall be appraised prior to the date of substitution and shall thereafter be subject to reappraisal as set forth in the immediately preceding sentence.

NAI shall prepare and submit semi-annually and on each date on which collateral is substituted a report itemizing each item of collateral and its value. NAI may substitute other items of real or personal property for items of the GO Mortgaged Property, whether real or personal property, provided the GO Collateral Requirement remains satisfied, and provided MAC approves the substitution. Notwithstanding the foregoing, MAC shall not unreasonably withhold its approval



to collateral substitution so long as the procedures set forth in Exhibit D relating to the provision of specified additional collateral to maintain the GO Collateral Requirement are followed. All appraisals shall be by the Appraiser appropriate to the item of property to be valued. NAI will add additional collateral within thirty (30) days after each required appraisal to the extent necessary to satisfy the GO Collateral Requirement. Costs of all Appraisals shall be the obligation of NAI; provided, however, that the optional Appraisals referenced above shall be at the expense of the requesting party.

4. Consent of Third Parties. NAI shall obtain the consent of all required third parties, as determined by MAC, with respect to the issuance of the GO Bonds, the release of prior encumbrances on the GO Mortgaged Property, and the perfection of security interests in the GO Mortgaged Property in favor of MAC.
5. Second Position GO Mortgages to State. At such time as the State Collateral is released by the State in accordance with the terms and conditions of the Duluth and Hibbing term sheets, MAC will also release its interest in the State Collateral and will grant or permit to be granted to the State a subordinated lien in a portion of the GO Mortgaged Property to the extent that the fair market value of the Airbus Maintenance Facility and Engine Repair Facility is insufficient to satisfy the 125% State Collateral Requirement (as defined in said term sheets). The portion of the GO Mortgaged Property available for this purpose shall be an amount thereof exclusive of such GO Mortgaged Property designated by MAC with a value equal to the sum of the unpaid principal balance of the MAC Loan, the unpaid principal balance of the GO Bonds, and the negative arbitrage requirement described below. For administrative convenience, the value of the available GO Mortgaged Property subjected to such subordinated lien may exceed the amount of the collateral insufficiency referenced above by a reasonable amount. The terms and conditions of the subordinated lien shall be acceptable to MAC in its sole discretion. The terms and conditions shall include provisions requiring the State, prior to any enforcement action in connection with its subordinated lien, to provide assurances acceptable to MAC that effectuation by the State of its remedies in connection with its subordinated lien will result in payment of proceeds to MAC sufficient to retire the MAC Loan and defease the GO Bonds. Such proceeds shall include amounts to cover the projected negative arbitrage in connection with such defeasance.

F. GO Appraisal.

The GO Appraisal will consist of one or more appraisals from an Appraiser expert with respect to the category of property to be appraised. The Uniform Standard of Professional Appraisal Practice will apply to the GO Appraisal. The GO Appraisal will establish the Fair Market Value of the GO Facilities and the GO Mortgaged Property. Fair Market Value is defined as the estimated amount at which the properties might be expected to be exchanged between a willing buyer and a willing seller, neither being under compulsion, each having reasonable knowledge of all relevant facts, with equity to both. The initial Appraisers for the GO Facilities and the GO Mortgaged Property consisting of assets other than Simulators, routes, gates and slots, shall be Marquette Partners. In this regard, Marquette Partners shall subcontract with American Appraisal Associates for research and support. The initial Appraisers for the Simulators, routes, gates and slots, shall be Airline

Economics, Inc. In this regard, Airline Economics, Inc. shall subcontract with Marquette Partners for research and support. Subsequent Appraisals shall be performed by qualified independent Appraisers designated by NAI (unilaterally or in response to a request by MAC) within a reasonable period of time prior to any subsequent Appraisal. Such designated Appraisers shall be acceptable to MAC. In the event NAI and MAC are unable to agree on the identity of the Appraiser within 30 days, MAC and NAI shall each submit lists of acceptable Appraisers and the Appraiser shall be selected by arbitration in accordance with the commercial arbitration rules of the American Arbitration Association.

G. Documentation.

All documentation in connection with the Financing pertaining to the GO Bonds, including without limitation, the GO Bond Documents, the GO Bonds Resolution, the GO Facilities Purchase Agreements, the GO Leases, the GO Loans, the MAC Loan, the GO Mortgages and supporting documentation relating to such documents shall be in form and content acceptable to MAC and shall be prepared by MAC or parties acceptable to MAC. In connection with the Financing, NAI shall furnish an opinion of counsel satisfactory to MAC pertaining to the execution, delivery and enforceability of the documentation, perfection of security interests in the collateral, and such other matters as MAC shall request.

H. Costs.

All costs of issuance shall be paid from proceeds of the GO Bonds, the Revenue Bonds or the MAC Loan, and shall be subject to NAI and MAC approval.

III. REVENUE BOND FINANCING.

A. Revenue Bond Terms.

1. General. The Revenue Bonds will be issued in one or more series in a principal amount of approximately \$79,000,000. The proceeds of the Revenue Bonds will be principally utilized by MAC to (i) purchase Revenue Facilities from NAI or NAI affiliates (which facilities will then be leased back to NAI pursuant to Revenue Leases) and (ii) to refinance certain Revenue Facilities pursuant to a purchase of NAI's leasehold interest in certain facilities together with a leaseback of such facilities to NAI under Revenue Leases (for the same term as the original leaseholds).
2. Term. The Revenue Bonds will mature and be fully amortized over a ten-year term.
3. Rate. The interest rate on the revenue bonds will be at a market rate.
4. Redemption. Revenue bonds are subject to redemption at such times as shall be agreed to by MAC, NAI and the Underwriters.
5. Security. The Revenue Bonds will be secured by (i) a pledge of the net rental income under the Revenue Leases, (ii) the portion of the Revenue Reserve Requirement constituting cash deposits; (iii) the portion of the Revenue Reserve

Requirement constituting the IRRRB Liquidity Facility; (iv) Revenue Mortgages given by NAI on the Revenue Facilities and (v) such other collateral as is necessary to meet the Revenue Bonds Collateral Requirement (currently contemplated to be spare aircraft and engine parts).

NAI will enter into Revenue Leases, as hereinafter described, pursuant to which NAI will agree to make triple-net lease payments at the times and in the amounts necessary, with investment income credited thereto, to pay the debt service on the Revenue Bonds as due. To secure its obligations under the Revenue Leases, NAI will execute a Revenue Mortgage, as hereinafter described, pursuant to which a first mortgage lien and security interest will be created with respect to the Revenue Facilities and such other collateral as is required to meet the Revenue Bond Collateral Requirement with respect to the Revenue Bonds. The Revenue Leases and Revenue Mortgages shall be assigned to an indenture trustee, as required, to secure the repayment of the Revenue Bonds.

6. Reserve Requirement. The reserve requirement with respect to the Revenue Bonds will be equal to three years' annual debt service on the Revenue Bonds (the "Revenue Reserve Requirement"). The issue of the Revenue Bonds will be sized so as to assure that, to the fullest extent possible, net bond proceeds of approximately \$50,000,000.00 (after costs of issuance and the funding of the cash deposit portion of the Revenue Reserve Requirement) will be available to purchase or refinance Revenue Bond Facilities as more fully described in Paragraph III(A)(7) below. The cash deposit portion of the Revenue Reserve Requirement shall be the Revenue Reserve Requirement less the amount of the IRRRB Liquidity Facility.
7. Use of Proceeds. The proceeds of the Revenue Bonds will be used by MAC to purchase from NAI Revenue Facilities. MAC will lease the Revenue Facilities back to NAI or its designee pursuant to the Revenue Leases. The Revenue Leases may be structured for tax purposes as financing leases or true leases at NAI's option and subject to input from the Underwriters; provided, however, the terms and conditions of the leases shall be satisfactory to MAC. The Revenue Facilities shall, at all times, be owned by MAC.
8. IRRRB Liquidity Facility. Concurrently with the issuance of the Revenue Bonds, the Iron Range Resource and Rehabilitation Board ("IRRRB") shall cause a liquidity facility in the amount of \$15,000,000.00 in form and content acceptable to the applicable rating agency (hereinafter "IRRRB Liquidity Facility") to be issued as part of the Revenue Reserve Requirement.
9. Rating. The parties shall endeavor to cause the Revenue Bonds to be rated at investment grade.

B. Revenue Bond Resolution.

The Revenue Bonds will be authorized and issued and the security provisions with respect thereto will be provided for pursuant to a Revenue Bond Resolution to be adopted by MAC pursuant to applicable statutory authority. The Revenue Bond Resolution may also provide for the terms and conditions upon which the Revenue Bonds may be redeemed and additional bonds may be issued. Because the Revenue Mortgaged Property under the

Revenue Mortgage will be assigned to secure the repayment of the Revenue Bonds, an indenture of trust with respect to the Revenue Bonds will also be required.

C. Revenue Facilities Purchase Agreement.

See corresponding discussion with respect to the GO Bonds.

D. Revenue Leases.

1. General Terms. See corresponding discussion with respect to GO Leases. The requirements set forth in the corresponding discussion are subject to additional input from the Underwriters.
2. Payment Obligations. See corresponding discussion with respect to GO Bonds. The requirements set forth in the corresponding discussion are subject to additional input from the Underwriters.
3. Other Provisions. See corresponding discussion with respect to GO Bonds. The requirements set forth in the corresponding discussion are subject to additional input from the Underwriters.
4. Public Policy Covenants. See corresponding discussion with respect to GO Bonds.

E. Revenue Mortgage.

1. Revenue Mortgaged Property. The Revenue Mortgage will create a first mortgage lien on and security interest in the Revenue Mortgaged Property. The Revenue Mortgaged Property will have an appraised value at all times, as periodically verified, sufficient to meet the Revenue Bond Collateral Requirement. The Revenue Mortgaged Property will consist of the Revenue Facilities and other collateral satisfactory to the NAI, MAC and the Underwriters to the extent required.
2. General Covenants. See corresponding discussion relating to GO Bonds. The requirements set forth in the corresponding discussion are subject to additional input from the Underwriters.
3. Collateral Evaluation and Maintenance of Collateral Value. See corresponding discussion relating to GO Bonds. The requirements set forth in the corresponding discussion are subject to additional input from the Underwriters.

F. Revenue Facilities Appraisal.

See corresponding discussion relating to GO Bonds. The requirements set forth in the corresponding discussion are subject to additional input from the Underwriters.

G. Documentation.

See corresponding discussion relating to GO Bonds. The requirements set forth in the corresponding discussion are subject to additional input from the Underwriters.

H. Costs.

See corresponding discussion relating to GO Bonds.

**EXHIBIT A**  
**PARTIES, DOCUMENTS AND OTHER DEFINED TERMS**

**Airport** - the Minneapolis - St. Paul International Airport

**Airport Facilities** - the following facilities located at Minneapolis - St. Paul International Airport: Building B, Building C, Building F, Building G, Gold Concourse and Sun Country Hangar (sometimes hereinafter individually referred to as "Airport Facility") and building contents thereof (but never in excess of \$7 million in value thereof for collateral purposes) acceptable to MAC.

**Appraised Value** - the value of the GO Mortgaged Property or the Revenue Mortgage Property, as the case may be, or parts thereof as determined by the Appraiser

**Appraisers** - the appraisers identified in Paragraph II(F).

**Duluth Term Sheet** - the term sheet for the Duluth Aircraft Maintenance Facility.

**GO Appraisal** - the appraisal by the Appraiser with respect to value of the GO Mortgaged Property

**GO Bonds** - the \$270,000,000 General Obligation Revenue Bonds issued by MAC

**GO Bonds Resolution** - the GO Bond Resolution to be adopted by MAC authorizing the GO Bonds

**GO Collateral Requirement** - an Appraised Value, as periodically verified, at all times equal to 145% of the sum of the principal amount of the outstanding GO Bonds and the outstanding principal amount of the MAC Loan. The portion of the GO Reserve Requirement, if any, on deposit each October 1 which represents payments due on principal on the GO Bonds during the next twenty-seven (27) months shall be deemed, to the extent permitted under MAC's enabling legislation, to be collateral for purposes of satisfying the GO Collateral Requirement. Further, the 145% referenced in this definition is subject to reduction to not less than 135% as more fully described in Exhibit D to this Term Sheet.

**GO Facilities** - the facilities financed from the proceeds of the GO Bonds

**GO Leases** - the Leases between MAC, as lessor, and NWA, as lessee, with respect to the GO Facilities

**GO Loans** - the loans between MAC, as lender, and NAI, as borrower, with respect to the refinancing of NAI leasehold interests in certain GO Facilities

**GO Mortgage** - the Mortgage and Security Agreement from NAI to MAC covering the GO Mortgaged Property

**GO Mortgaged Property** - the real and personal property pledged by NAI pursuant to GO Mortgages to secure performance of NAI obligations under the GO Leases, GO Loans, MAC Loan and underlying obligations

**GO Purchase Agreement** - the Purchase Agreement for the GO Facilities

**Hibbing Term Sheet** - the term sheet for the Hibbing Engine Repair Facility.

**MAC** - Metropolitan Airports Commission

**NATCO Facility** - the NATCO Training Facility in Eagan, Minnesota, currently owned and operated by an NAI affiliate.

**NAI** - Northwest Airlines Inc. and its affiliates

**Revenue Appraisal** - the appraisal by the Appraiser with respect to the value of the Revenue Mortgaged Property

**Revenue Bonds** - Subordinate Lien Revenue Bonds issued by MAC

**Revenue Bonds Collateral Requirement** - an Appraised Value, as periodically verified, at all times equal to an estimated percentage of 200% of the principal amount of the outstanding Revenue Bonds. The Revenue Reserve Requirement shall not be included in determining the Revenue Bonds Collateral Requirement.

**Revenue Bonds Indenture** - the indenture of trust by and between MAC and the Trustee relating to the Revenue Bonds

**Revenue Bonds Resolution** - the Revenue Bonds Resolution to be adopted by MAC authorizing the Revenue Bonds

**Revenue Facilities** - the real and personal properties financed or refinanced with the proceeds from the Revenue Bonds

**Revenue Lease** - the lease or leases between MAC, as lessor, and NAI, as lessee, relating to the Revenue Facilities

**Revenue Mortgages** - the mortgage and security agreement from NAI to MAC with respect to the Revenue Mortgaged Property

**Revenue Mortgaged Property** - the real and personal property pledged by NAI pursuant to Revenue Mortgages to secure performance of NAI obligations under the Revenue Leases and underlying obligations

**Revenue Official Statement** - the official statement concerning the Revenue Bonds and the underlying documents

**Simulators** - the flight training simulators now or hereafter maintained at the NATCO Facility.

**Underwriters** - Dain Bosworth, Inc. and Morgan Stanley & Co., Inc.

**EXHIBIT B**  
**HEADQUARTERS AND EMPLOYMENT COVENANT**

NAI covenants and pledges:

- a. In order to satisfy the statutory requirements concerning the retention of employment, operations and facilities, it and its affiliates will employ personnel in the Minneapolis-St. Paul metropolitan area and the State of Minnesota at substantially the level that existed as of the date of the MAC Bonds;
- b. It will cause personnel to be employed at the Duluth and Hibbing Facilities, upon their respective completion and full operation, at substantially the following levels, respectively, 1,000 and 500 persons; and
- c. It will maintain its corporate headquarters in the Minneapolis-St. Paul metropolitan area.

The foregoing covenants shall not be deemed to prevent NAI or its affiliates:

- i) from moving particular categories of employment or the facilities or operations associated therewith (other than corporate headquarters) from Minnesota, provided the required employment levels are maintained; or
- ii) from reducing or changing its Minnesota employment, operations or facilities (other than the location of its corporate headquarters) in response to force majeure, business conditions, technology changes or statutory or regulatory changes; provided, except to the extent prohibited by applicable law and contractual obligations, NAI will use its best efforts to cause any such reductions or changes in Minnesota to be substantially proportional to the comparable reductions or changes occurring elsewhere, taking into account the category and character of employment, facility or operation.

"Corporate headquarters" means the principal office of NAI from which its business is conducted and the principal office of the chief executive officer of NAI.

"NAI" means Northwest Airlines, Inc. and any successor tenant under the GO Leases.



**EXHIBIT C**  
**NOISE ABATEMENT COVENANTS**

NAI shall agree with respect to noise abatement at the Minneapolis-St. Paul International Airport (the "Airport"), as follows:

- (1) to consent to provide its proportionate share of air carrier funding for soundproofing, purchase assurance and other off-airport noise compatibility programs of not less than \$2,000,000 per year beginning in 1994 through termination of the scheduled air carrier use and lease agreement;
- (2) to guarantee that it will accept delivery of not less than \$390,000,000 of Stage 3 aircraft in 1992;
- (3) to limit the proportional utilization of Stage 2 aircraft at the Airport (calculated on an annualized basis) beginning in 1992 to be no more than the proportional utilization of Stage 2 aircraft throughout NAI's domestic system, and in addition not to increase the Stage 2 proportional utilization at the Airport in any year above the prior year's utilization, beginning in 1993; and
- (4) to agree to an 11:00 p.m. to 6:00 a.m. curfew, for scheduled passenger flights of Stage 2 aircraft scheduled to arrive or depart during such time period.

## EXHIBIT D

### GO MORTGAGED PROPERTY

#### G.O. BOND LOAN

The legislation requires that the loan amount for the General Obligation Bonds be no greater than 85% of the fair market value of the facilities to be purchased. The following represents the approach necessary to support the purchase price of \$270 million:

NATCO Value as a going concern -	\$280,000,000
Other Airport Facilities (to be determined)	<u>38,000,000</u>
Total	\$318,000,000
 85% of FMV -	 \$270,300,000

#### ACCEPTABLE COLLATERAL:

##### 1. NATCO

Simulators	\$175.2	
Computers	1.2	
Parts	3.4	
Equipment	6.2	
Land/Building	<u>17.0</u> *	
Total:		\$203.0 million

##### 2. AIRCRAFT PARTS

McDonnell Douglas aircraft parts and engine parts	\$ 40.0 million
--	-----------------

##### 3. AIRPORT FACILITIES\*

Building F	\$14.0	
Sun Country Hangar	2.7	
Building G	.8	
Bldg B, C & Gold Improvements	<u>7.0</u>	
Total		\$ 24.5 million

---

\* Subject to completion of appraisal.

4. INTERNATIONAL ROUTES

Boston-London  
Boston-Amsterdam  
Boston-Frankfurt  
Boston-Glasgow

Total Revenue thru 9/30/91 \$174.0

Revenue Multiple = 1.2

Collateral Value = \$208.8 million

5. G.O. LOAN DEBT SERVICE RESERVE

Amount on deposit each October 1 which represents principal payments due during the next 27 months.

1/1/92 amount = 0.0

TOTAL COLLATERAL \$476.3 million

Amount to be collateralized: \$308 million  
(G.O. Bonds plus MAC loan)

Collateral % = 155%

Collateral requirement for funds borrowed by NWA from MAC will be a minimum of 145% of the sum of (i) the outstanding principal balance on the G.O. Bonds and (ii) the outstanding principal balance of the MAC Loan. MAC will reduce the actual collateral percentage in effect by 5% for each consecutive full calendar year which NAI maintains an investment grade rating from both Moody's and S&P on its senior unsecured debt, until the collateral percentage reaches 135%. However, the collateral requirement would immediately return to 145% if either S&P or Moody's rates any of NAI's unsecured senior debt at a level lower than investment grade.

At all times during the term of the loan all simulators owned or subsequently acquired by NAI will be added as collateral within 30 days of the date of acquisition. Other collateral may be added or deleted in the following priority order:

When additional collateral is needed:

1. Aircraft parts/engine parts
2. Other collateral acceptable to MAC

**When collateral is reduced:**

1. **Airport Facilities.**
2. **Airport Building Contents.**
3. **International routes will be reduced until this category reaches 20% of the existing collateral package. Routes may then be maintained, at NAI's option, at no more than 20% of the collateral total for the balance of the lease term.**
4. **NATCO parts, computers and equipment.**
5. **NATCO Buildings and Land.**
6. **PARTS - NAI may keep a reasonable amount of aircraft or engine parts as part of the collateral package to provide for necessary flexibility in arriving at the actual collateral amount required.**
7. **NATCO Simulators - At such time as the percentage of collateral in the package represented by simulators reaches 60%, as a result of reductions and substitutions, NAI will then maintain simulators at that 60% level for the balance of the lease term.**

FAEGRE & BENSON

2200 NORWEST CENTER  
90 SOUTH SEVENTH STREET  
MINNEAPOLIS, MINNESOTA 55402-3901

612 336-3000  
FACSIMILE 336-3026

November 8, 1991

Mr. Hugh K. Schilling, Chairman  
Metropolitan Airports Commission  
6040 28th Avenue South  
Minneapolis, MN 55450

RE: Price Waterhouse Report on Northwest Airlines

Dear Mr. Schilling:

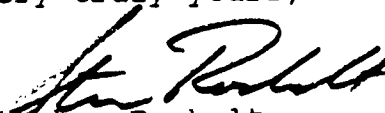
You requested our opinion as to the legal sufficiency for purposes of issuing bonds under Chapter 350, Minnesota Laws of 1991 (the "Act") of the report prepared by Price Waterhouse & Co. entitled "Metropolitan Airports Commission - Financial Analysis of Northwest Airlines". The report includes as an appendix the analysis prepared by Airline Economics, Inc. entitled "Status of the Airline Industry and Northwest Airlines". Based on our review of the report, it is our opinion that the report satisfies the requirement of Art. 2, Sec. 4, Subd. 3(2) of the Act that the Commission receive a due diligence report as a condition to the issuance of bonds.

Specifically, the Act requires a satisfactory written report on the financial condition of Northwest, "projecting available revenues of the airline corporation at least sufficient during each year of the proposed revenue bonds to pay when due all financial obligations of the airline corporation under the revenue agreements and leases described in subdivision 1 and stating the factors on which the projection is based".

Part 1(A) of the report sets forth the manner in which Price Waterhouse applied the key terms of this provision of the Act in its analysis. We agree that Price Waterhouse's interpretation is appropriate under the circumstances.

We believe the specific projection required by the Act is stated in the last full paragraph of page 8 of the cover letter to the report. The factors underlying that conclusion are identified throughout the report.

Very truly yours,



Stephen Rosholt

SR:1kl  
MFF00198.WP5

## CHAPTER 350, ARTICLE 3, SECTION 2

Sec. 2. [STATE AND METROPOLITAN BONDS; REVIEW AND APPROVAL.]

The metropolitan airports commission may not issue bonds authorized by this act without the approval of the commissioner of finance and the legislative commission on planning and fiscal policy, provided that the provisions of article 1, section 15, specifically apply to this approval requirement. Before the commissioner of finance issues bonds authorized by this act, the commissioner shall report the amount of bonds to be issued, a detailed description of the projects and facilities to be financed by the bonds, and the terms of the lease, loan, and revenue agreements to the legislative commission on planning and fiscal policy for its advisory recommendation. The recommendation is positive if not received by the commission or commissioner within ten days.

**The Economics of  
the Airline Industry  
and the Financial  
Condition of  
Northwest Airlines**

**Report to:**

**State of Minnesota  
Department of Finance**

**September, 1991**

***The Arvai Group  
Tribeca Aviation  
Harbridge House, Inc***



This report was prepared by The Arvai Group for the account of the State of Minnesota, Department of Finance. The material in it reflects the best judgement of The Arvai Group in light of the information available at the time of preparation. Any use which a third party makes of this report, or any reliance or any decisions to be made based on it, are the responsibility of such third party. The Arvai Group accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken based on this report.

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## **I. Summary and Conclusions**

The State of Minnesota, through legislative action, is contemplating two bond financing transactions which support Northwest Airlines, a major employer headquartered in Eagan, including the construction of an airframe maintenance facility in Duluth and an engine repair facility in Hibbing. This report documents the findings of a "due diligence" study of the economics of the airline industry and the financial condition of Northwest Airlines conducted for the Minnesota Department of Finance.

### **Major Findings**

**The proposed transaction appears to be a "win-win" situation for the State and Northwest Airlines.** Northwest obtains low interest rate financing, regional subsidies and tax benefits for its new maintenance facilities in northern Minnesota while the State gains from increased employment and economic development in an area with a weak economy. This type of transaction is becoming common in the airline industry, as evidenced by recent State of Texas support of American Airlines maintenance facilities at Alliance Airport and State of Colorado support for new United Airlines facilities at Denver.

**This transaction, however, is not without financial risk, even though it is probable that Northwest will survive and continue to make lease payments on the facility.** While we believe Northwest will be one of the surviving U.S. carriers, it and its parent companies, are thinly capitalized and, with recent losses and poor industry conditions, continue to have a high debt load. While Northwest's strategies and business plans call for significant financial improvement, the carrier lacks the "financial safety net" a strong balance sheet would provide and could be more vulnerable than financially stronger carriers as it must rely on credit lines to weather unexpected events. The weakened financial position of the carrier in the post-Gulf War environment presents an element of risk which cannot be ignored with respect to its ability to make lease payments on the facilities. A sustained recession, fuel crisis, or deleterious price war could have a materially adverse impact on Northwest's financial results, and, in a worst case scenario, force the sale of assets or other harsh measures to be taken for survival.

**Northwest is well positioned for future growth in the airline industry.** Northwest has a good route structure, including potentially lucrative unused route authorities in the fast-growing Asian market, two strong dominant domestic hubs, an aggressive fleet modernization plan, and is attempting to capitalize on turbulence in the industry through selective acquisitions.

**Northwest has built a qualified management team.** More than half of Northwest's senior management team is new since the leveraged buy-out in 1989. On the whole, the new executives have strong track records and appear to be suitably qualified for their positions. While many members of the team are inexperienced in the airline industry and the team has not worked together for a long period, the strategies being developed at Northwest

appear to be reasonable and focus on key areas for improving its competitive position.

**Aggressive Strategies for Improvement will guide Northwest in the next 5 years.**

Northwest's stated strategy, since the leverage buy-out, is to create Northwest as the "airline of preference". This aggressive program of actions, many of which will be implemented during the fourth quarter of 1991, is designed to improve Northwest's service. This program requires investment, and despite recent losses, management is committed to completing the program and plans to continue to invest in training and capital improvements to implement this "service turnaround".

**Northwest's ability to achieve its goals may be determined by forces beyond its control.**

The airline industry is today, in a state of transition. With several U.S. carriers in bankruptcy, a repositioning of routes and assets is in process. Within the last year, United has purchased Pan Am's London routes, American has purchased TWA's London routes, and Delta has purchased a major portion of Pan Am, including its northeast shuttle and Frankfurt hub. The market power and economies of scale available to the major players have been increasing vis-a-vis Northwest and other participants.

Periodic shocks to the airline industry are common, and while their impact is not likely to be as great as the combined impacts of the Gulf War, fear of terrorism and economic recession just experienced, it is likely that periodically, major, unexpected events will play a role in the industry during the next 5 years. With its thin financial cushion, Northwest could be vulnerable to pricing and other competitive actions.

**Northwest's strategies and programs are ambitious.** Northwest's strategies for improvement impact the entire airline, and will require changes by each of the 45,000 employees of the airline in how they perform their duties. Major change always entails a degree of risk. Our assessment of the strategies of Northwest is that while they are achievable, not achieving them could place the carrier in jeopardy because of its lack of financial strength.

**Recommendations to the State of Minnesota**

**The proposed Duluth and Hibbing financing transactions entail significant risk.** We therefore recommend a series of actions to better secure the State's position as a guarantor. We recommend:

- That the State obtain marketable collateral to further secure its position, which could be in the form of international route authorities or take-off and landing slots which act as underlying security. As Northwest frees up collateral from its current indentures, it can provide additional coverage for the State in the form of "hard assets".
- That the State work with Northwest to attract additional participants to the

party maintenance facilities to ensure a degree of continuity at the facilities should Northwest be unable to continue to meet its lease obligations. The possibility of attracting Airbus Industrie or its member companies to co-locate a North American maintenance facility with Northwest should be aggressively pursued.

- That the State ensure that the design and layout of the facilities are appropriate for possible use by a party other than Northwest, and that provisions for a full complement of maintenance shops, appropriately sized for growth, are included in the facility plans and approvals.
- That the State include appropriate terms and conditions to further secure its interests as a part of the transaction, including parity with the LBO banks on debt covenants and conditions.
- That in the event of default by Northwest, the state obtain assignments of any third party rental or use payments for the facilities.

## II. Study Objectives and Scope

The Arvai Group has been engaged by the State of Minnesota, Department of Finance to conduct due diligence with respect to a proposed transaction involving a bond issue for the construction of airframe and engine maintenance facilities for Northwest Airlines. The Commissioner of Finance of the State of Minnesota has been authorized by the legislature to issue up to \$350 million of state revenue bonds covering two separate maintenance facilities within the state. An aircraft maintenance facility initially estimated to cost \$250 million is proposed for Duluth and an engine repair facility initially estimated to cost \$100 million is proposed for Hibbing. It is anticipated that Northwest Airlines will lease each of these facilities for a term of 30 years.

In its enabling legislation, the 1991 Minnesota Legislature required the Commissioner of Finance to engage an independent nationally recognized consultant having special expertise with the airline industry and its financing to prepare a written report on the financial condition of the lessee of the aircraft maintenance facility and the engine maintenance facility. The legislation specified that the report should include assessments of the current economics of the airline industry, the future economics of the airline industry, the current financial condition of Northwest Airlines, a forecast of Northwest Airlines future position in the industry, and a projection of its financial condition with respect to its ability to make the required lease payments.

The objective of our study is straightforward, and entails providing a thorough due diligence analysis of Northwest Airlines, in which we raise issues or "red flags" in areas in which could materially impact Northwest's future ability to fulfill its lease commitments for the proposed aircraft maintenance and engine repair facilities. The scope of our analysis entails an overview of the airline industry, specifically its current and likely future economic states and the factors which impact it; as well as an assessment of Northwest Airlines' current and future competitive position and financial condition.

More specifically, our review includes:

- The current economics of the airline industry
- The future economics of the airline industry
- The current financial condition of Northwest Airlines and its affiliates
- A forecast of where Northwest will be in the future economics of the industry
- A review of Northwest's projected financial condition
- Advice to the state on the value of the proposed projects under various industry scenarios

- Advice to the state on terms and conditions and the need for collateral
- A review of Northwest's need for the projects.

This report summarizes our due diligence activities.



### **III. Study Team and Activities**

This section of the report documents the activities undertaken by The Arvai Group in its review of Northwest Airlines and the background of each member of the study team.

#### **Study Team**

For this study, The Arvai Group assembled a team of industry experts to analyze the current and future prospects of Northwest Airlines. The team leader, Mr. Ernest S. Arvai, President of The Arvai Group, formerly directed the Airline and Aviation Industries consulting practice at Arthur D. Little, Inc. and has more than 20 years professional experience. He has worked with a number of airline clients in the United States and abroad and is a widely quoted expert on the industry.

Mr. Thomas J. Flanagan, formerly Senior Vice President - Operations for Pan American World Airways was the primary reviewer of Northwest's airline operations, the need for the maintenance facilities and Northwest's fleet plan. Mr. Flanagan has more than 40 years airline management experience.

Ms. Laura A. Poler, formerly Manager- Business Development for American Express Travel Related Services, was the primary reviewer of Northwest's marketing and customer service functions. She has extensive experience in travel distribution and promotion, and has worked with airlines to develop travel promotions.

Tribeca Aviation, Ltd. was responsible for the financial aspects of the due diligence assignment. Tribeca Aviation provides financial consulting and investment banking services to the airline and aviation industry, and two members of the its staff participated in this assignment.

Mr. Gerald L. Gitner, former Vice Chairman of Pan American World Airways and former President of Texas Air Corporation, reviewed Northwest's overall strategy and served as a quality reviewer for the other functional areas. He is Chairman of Tribeca Aviation, has served in various senior management positions at several companies and has participated in numerous public and private financings.

Dr. William C. Farrell, Vice President and formerly Vice President - Planning for Western Air Lines and formerly Vice President with the investment bank Kidder Peabody focused on Northwest's current and future financial condition. Mr. Farrell has extensive air finance experience.

Harbridge House, Inc., a noted Boston-based consulting firm, is also a subcontractor to The Arvai Group for this assignment. Mr. Daniel M. Kasper, formerly Director of International Aviation for the United States Civil Aeronautics Board, focused on the analysis of the airline industry. He is widely recognized on industry affairs and his regulatory

background in international aviation provided a perspective on Northwest's international operations.

### **Study Activities**

Our study activities can be summarized into three major areas, data gathering, interviews and analysis.

### **Data Gathering**

Our data collection efforts concentrated on gathering relevant information pertaining to Northwest Airlines financial and competitive position within the industry, and entailed a number of sources beyond the airline itself. For our industry and airline analyses, we spoke with individuals at airframe manufacturers, engine manufacturers, aircraft lessors, financial institutions, economic forecasters, aircraft leasing companies, Wall Street analysts, former Northwest employees, the Department of Transportation, the Air Transport Association and other industry opinion leaders. We also discussed Northwest with a geographically mixed sample of travel agencies to obtain market information and customer insights.

We conducted a literature search on Northwest, covering both industry publications and major journals and newspapers, and gathered papers relevant to the future of the industry presented at several recent industry conferences as well as publicly available testimony to various governmental bodies. Combined with the information gathered from Northwest on the airline's financial condition, fleet, strategy and budgets, maintenance and key operating statistics, marketing plans and other information, we assembled a comprehensive database on Northwest Airlines.

### **Interviews**

We completed a comprehensive interview program of Northwest Airline's most senior management, and its staff below the senior management level. Matching our experts to their counterpart areas of Northwest, we interviewed virtually the entire executive team, as shown in Exhibit III-1. In addition to interviews at Northwest, we spoke with leaders of the Air Line Pilots Association (ALPA) and the Teamsters unions representing flight attendants, Banker's Trust, the lead bank for Northwest's LBO debt, a number of travel agencies who distribute tickets for Northwest (on a not for attribution basis) to assess the travel agency industry view of the carrier, and other industry participants and opinion leaders, including aircraft manufacturing and leasing firms.

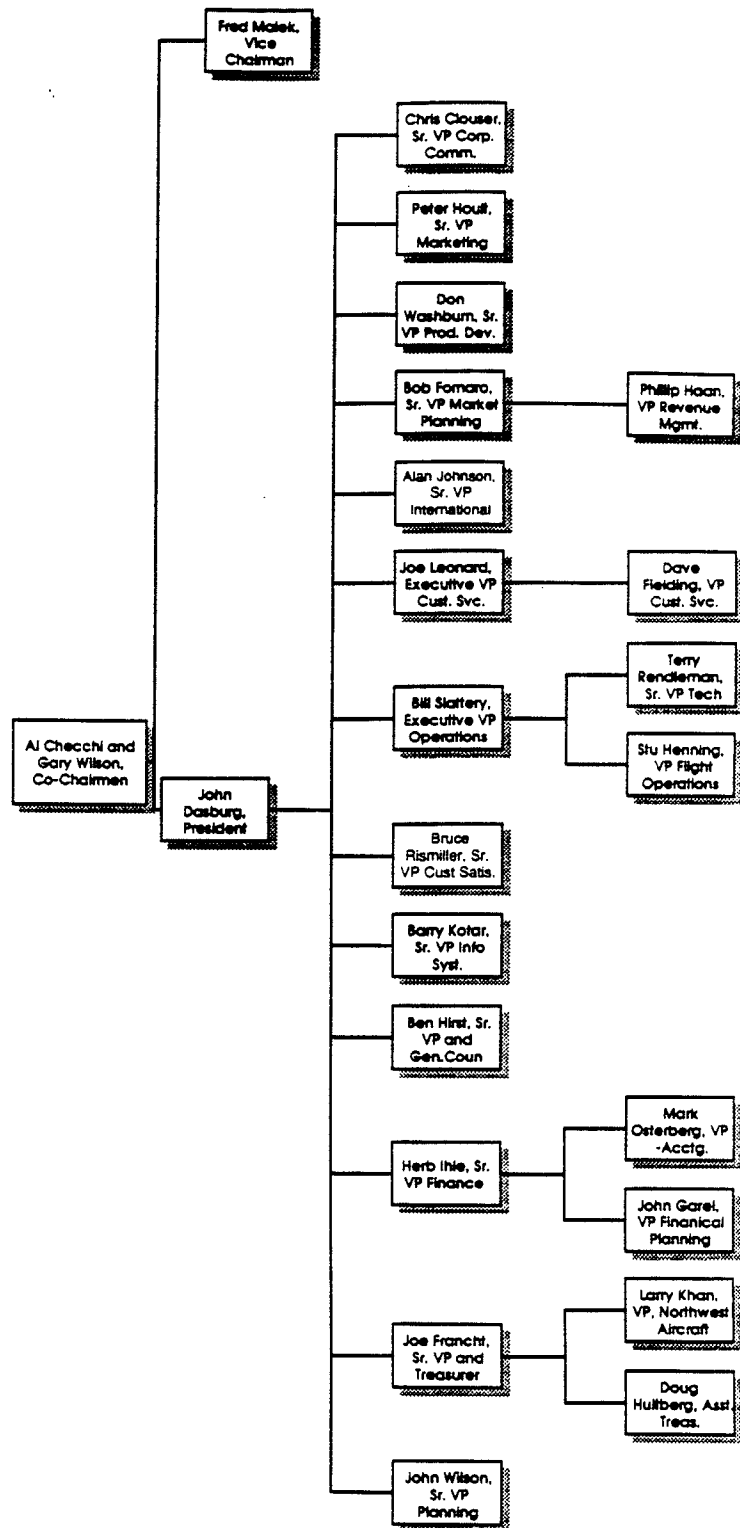
### **Analysis**

After completion of our interviews and data gathering, we analyzed each functional area of the company and reviewed, in detail, their strategic plan and financial projections. We examined the assumptions behind those projections, and examined the sensitivity of those

assumptions on the projected financial results of the airline. Once our analyses of Northwest's financial condition and assessment of risk were completed, we developed our conclusions and recommendations for the State.

# Exhibit III-1 Northwest Executive Team Interviews

Interviewed executives in bold type



#### **IV. The Maintenance and Engine Repair Facilities Market**

A major concern of the State in entering this transaction is the potential re-marketability of the facilities in Northern Minnesota should Northwest be unable to make required lease payments. In this section of the report, we will address the nature of the facilities, Northwest's need for the facilities, the marketability of the facilities, and the market for maintenance services.

##### **The Facilities to be Financed**

An aircraft maintenance base is proposed for Duluth to maintain Northwest's new high technology Airbus A-320 and future A-330 and A-340 aircraft. The facility, for which the legislature has authorized up to \$250 million in revenue bonds to finance, is planned in several phases, incorporating narrow and wide-body hangars while maintaining the maximum flexibility for future needs.

While the facility has not as yet been designed, several innovative concepts are being considered. One entails the development of a hexagonal shaped building, in which six aircraft bays surround a center core of component shops. In such a design, the distance from any single shop to an aircraft would be shorter and the overall productive space for the facility maximized. Other, more traditional layouts, which may be more suitable for future expansion, are also being considered.

It is anticipated that the maintenance base will be approximately 875,000 square feet in size once the first phases are completed. Potential for additional growth, and doubling the size of the base, could be accommodated easily on the site at Duluth International Airport. Employment for the maintenance base is estimated to reach 1,500 workers when the facility is operating at full capacity.

The engine repair facility planned for Hibbing will focus on large engines for Northwest Airlines. Candidates for repair in Hibbing include the CFM International CFM-56 series of engines. CFM International is a joint venture between General Electric in the U.S. and SNECMA in France, and the CFM-56, with minor variations, powers the Airbus A-320 and future A-321 and A-340 models as well as the existing Boeing 737-300, -400 and -500. The engine has also been used in re-engining programs for the DC-8-60 series and KC-135 (Boeing 707 variant) tankers for the U.S. military. Other engines, including the Pratt & Whitney JT8D (Boeing 727 and Douglas DC-9) and JT9D (Boeing 747 and Douglas DC-10) are also being considered for repair at this facility.

This facility, for which funding of up to \$100 million has been authorized by the legislature, could cost up to \$130 million to build, with \$30 million provided by Northwest or other parties. The facility will be a modern, environmentally compatible, state-of-the art engine repair center located at the Chiselm-Hibbing Airport. Northwest expects that this facility will employ 400 when fully operational.

## **Northwest's Need for the Facilities**

Northwest's current plans call for significant fleet growth between now and the end of the decade. Currently, Northwest operates 345 aircraft and estimates its current maintenance capacity at 350 aircraft. With a fleet of 509 aircraft planned by 2000, a shortfall in capacity to accommodate over 150 aircraft is projected, approximately 43% of today's capacity. In addition, due to increasing maintenance requirements for aging aircraft, Northwest's maintenance workload for its existing fleet will continue to grow.

The A-320 and forthcoming A-330 and A-340 aircraft utilize new technologies, in particular, fly-by-wire controls (in which ailerons and rudders are electronically controlled by computer rather than through hydraulics). Therefore, maintenance requirements and mechanic training for these aircraft will be quite different than for more conventional aircraft. This provides an opportunity for Northwest to re-examine maintenance procedures and to utilize advanced manufacturing techniques at the new facility. Management plans to utilize Total Quality Management (TQM) and employee participative management techniques to focus on continuous cycle time improvement, high quality and low cost through scale economies. These plans appear to be sensible and in line with current and projected industry practices.

Current plans for the base include a narrow-body hangar module, a wide body hangar module, a complement of attached support shops, a complement of remote support shops, airside tankage and utilities, and waste treatment and containment areas which will allow aircraft painting. We concur with and stress the importance of Northwest's decision to size the wide-body maintenance bays to be large enough to accommodate the 747-400. This will provide the maximum flexibility for potential third-party maintenance opportunities as well as for any subsequent user.

Northwest contemplates utilizing the facility for third-party maintenance, that is, maintaining aircraft for other operators. To accomplish this, Northwest has had discussions regarding potential joint ventures with several third party maintenance providers for both airframe and engine maintenance, and has also had discussions about joint participation by member companies within Airbus Industrie. The establishment of joint ventures and development of capabilities to market maintenance services in Northern Minnesota to others in the aviation industry will significantly reduce risk over the longer term.

## **The Marketability and Value of Facilities in Northern Minnesota**

In a worst case scenario, in which Northwest disappears from the picture, the value of maintenance facilities in Northern Minnesota would likely be significantly lower than their construction cost unless a viable, cost competitive third party maintenance business, with trained employees, was well established. If the facility had a third party maintenance partner, its use as an airline maintenance facility as a going concern would be significantly more likely. This might entail a separate corporate structure to insulate the facility from potential financial difficulties at Northwest. Projection of fair market value for the proposed

maintenance facilities into the future would be speculative, and only an appraisal taking into account the then current market conditions could provide an accurate picture. Nonetheless, without Northwest Airlines or third-party marketing expertise, a maintenance business using the facilities would likely face severe difficulties in competing in the marketplace.

Should the facility need to be leased to another entity in the event of a default, we would not assume that market lease rates could recover construction costs. Today, a significant number of attractive facilities are available, including the ex-Boeing facilities at Lake Charles, Louisiana and a number of sites at military bases designated for closing; these could compete with Duluth and Hibbing and are located in more hospitable climates. With the closest other airline hubs at Chicago, about a one-hour flight away, the likelihood of a major U.S. airline acquiring all the facilities in the event of a Northwest default is small, as other locations would better fit their route structures.

### **The Market for Aircraft Maintenance**

The market for aircraft maintenance is growing, and should parallel growth in the commercial aircraft fleet. Today, with the recession in the industry and a significant number of new and used commercial airliners in desert storage facilities, excess capacity in maintenance facilities exists. Several major aerospace firms, including Lockheed and Rockwell, have entered the commercial aircraft maintenance and modification business, and additional facilities, including the ex-Boeing facility at Lake Charles, remain unused. With a return to growth and profitability projected for the airline industry, and additional deliveries of aircraft continuing from the major manufacturers, the maintenance market should rebound, and a shake-out of some third party competitors may occur during the next three years.

The market for engine maintenance, with fewer new entrants, also offers growth opportunities, but faces the same market conditions in the industry as for airframe maintenance. Market prospects for engine maintenance are promising as growth in engine deliveries continues in the 1990s.

The recent announcement by American Airlines of a delay of aircraft deliveries and rescheduling of capital expenses reflects the current depressed financial conditions in the industry. The facilities proposed for Northern Minnesota are projected to be completed during a period which will likely be in the midst of the next upturn of the highly cyclical airline industry in 1993 and 1994.

### **A Shortage of Trained Mechanics is Forecast**

The Air Transport Association recently predicted that there will be a shortfall of 65,000 airframe and powerplant (A&P) mechanics by 1995. Because this number considers the approximately 18,000 new air frame and power plant mechanic licenses that are issued annually, the shortage of experienced mechanics will be even more pronounced.

Northwest recognized this potential shortfall early on among the major carriers and developed relationships with local trade schools to provide for airframe and powerplant mechanics. The ability to train and retain experienced mechanics in Northern Minnesota will be critical factors to the success of third party maintenance efforts and the marketability of the facility in the event of a default.

When the locations for the facilities were posted at Northwest for personnel bids, with the understanding that the company would not pay moving expenses, a significant number of employees from the Twin Cities applied for the Duluth and Hibbing facilities, indicating a positive attraction to the region. If the facilities can attract a stable work force committed to the Northern Minnesota area, they will be attractive to third party maintenance providers (who face shortages themselves in trained mechanics) and thus enhance the future market value of the facilities. State and local government support for training of aviation mechanics in local technical institutes and colleges in Northern Minnesota would help assure the availability of an adequate work force as the facilities expand, while helping to address the career aspirations of the local populace.



## **V. Economics of the Airline Industry**

Northwest's principal business is the provision of commercial airline services to passengers and shippers in both domestic and international markets. The long term growth prospects for these markets are generally regarded as quite positive. Virtually all major forecasts project continued healthy long term growth in the demand for both domestic and international air passengers and cargo.

### **Factors Underlying the Demand for Commercial Airline Services**

Historically, changes in the demand for passenger air transportation have been closely linked to two principal factors:

- Changes in the rate of growth experienced by the underlying economy; and
- Changes in the cost of air travel

In addition, in international markets, the political process for governmental approval of route authorities is also critical.

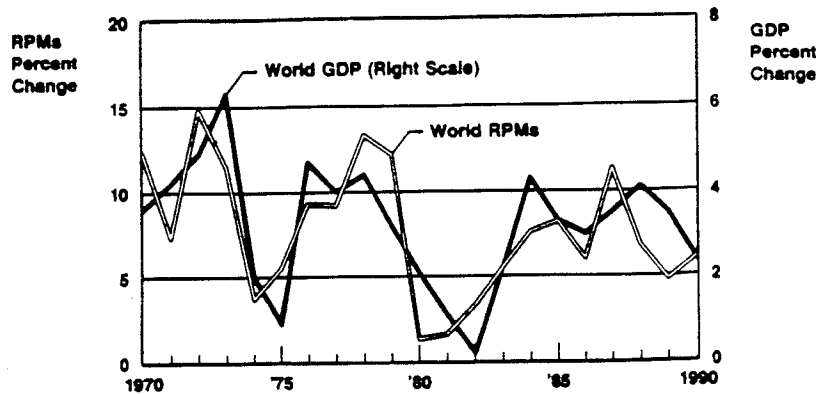
### **Economic Growth is closely related to both business and leisure air traffic demand.**

Business related air travel is a direct function of the level of economic activity. Thus, vigorous growth in incomes (GDP) typically translates directly into increased business travel. Similarly, recessions reduce the need for business travel, thereby reducing demand for commercial airline services. Likewise, changes in economic growth rates affect discretionary travel by impacting disposable personal incomes.

Overall, the demand for world air travel has tracked closely the underlying performance of the world economy, as shown in Exhibit V-1. The exhibit also illustrates that, like the underlying level of economic activity, passenger demand for air services displays significant cyclicity.

Long term economic forecasts for the U.S. and world economies indicate continued (and healthy) levels of economic growth, albeit at rates lower than those experienced in the preceding decade. Although precise long range forecasting is notoriously difficult, the fact that long term economic growth rates change slowly tends to make economic forecasts more reliable for projections covering reasonably long periods (e.g., ten or more years). This is illustrated by Exhibit V-2 which contains both historic growth rates and the projected rates used in a recent McDonnell Douglas traffic forecast.

### Exhibit V-1 World RPMs Versus World Economic Growth



Source: Boeing Commercial Airplane Company.

### Exhibit V-2 Long-Term World Economic Growth

Region	Annual Percent Change		
	1969-1979	1979-1989	1989-2010
North America	2.9	2.7	2.5
Latin America	5.8	1.6	3.6
Europe	3.5	2.1	2.3
Middle East	7.1	0.8	3.4
Africa	5.5	1.3	2.8
Asia/Pacific	5.4	5.1	4.4
USSR	3.8	2.0	1.4
<b>World</b>	<b>3.9</b>	<b>2.8</b>	<b>2.9</b>

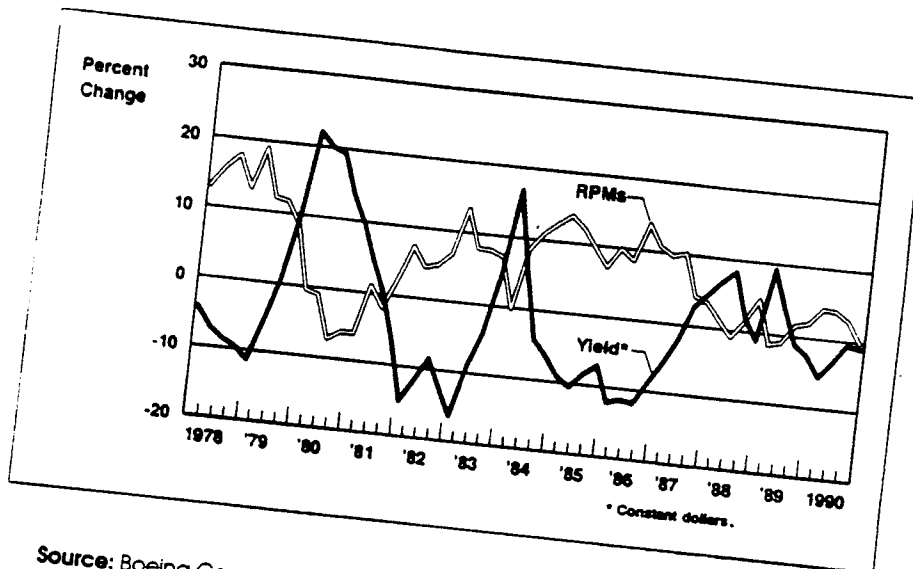
Source: McDonnell Douglas

For the period of 1990-2000, the widely used Boeing industry forecast projects an average growth rate of 2.5 percent per year for the U.S. economy and 3.0 percent for the world economy. Likewise, Douglas forecasts through 2010 project U.S. annual average growth in GDP of 2.5 percent, with world growth at 2.9 percent. Both are generally consistent with other widely-used long range economic forecasts, and we believe that they provide a reasonable basis for assessing the economic climate within which Northwest is likely to be operating over the coming two decades.

**The cost of air travel also impacts demand.** The demand for air transportation is also affected by changes in cost of air travel relative to other goods and services in the economy. Simply stated, if the price of air travel increases faster than for other goods and services in the economy, demand for commercial airline services will suffer. The standard measure of the cost of commercial airline travel is yield, which is the measure of how much, on average, airlines receive for each mile a (paying) passenger is carried. Yields are typically measured on the basis of so many cents per revenue passenger mile (RPM). Exhibit V-3 depicts the performance of the U.S. domestic market since 1978 to illustrate the inverse relationship between changes in the demand for air service and the cost of that service paid by travelers.

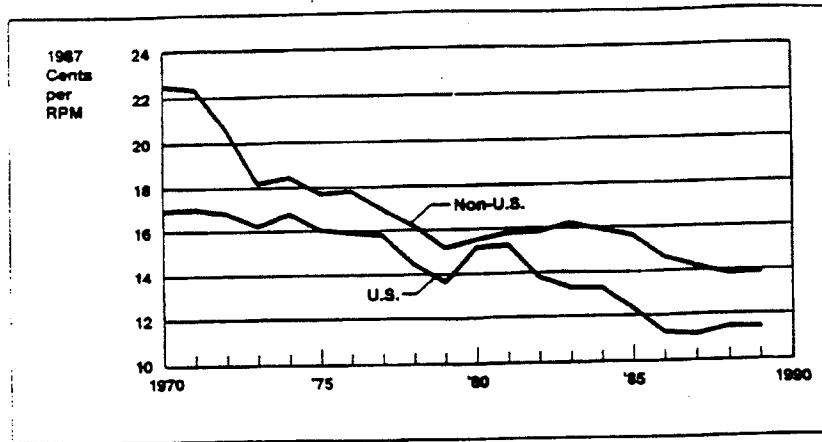
Notwithstanding the gyrations in both the direction and rates of change for airline yields reflected in Exhibit V-3, airline industry yields in real terms have declined sharply since 1970, as shown in Exhibit V-4. Moreover, most industry forecasts project that world airline yields will continue to decline, albeit more modestly, for at least the next decade. Boeing's yield forecast is shown in Exhibit V-5. For that same period, U.S. airline yields are expected to increase slightly.

**Exhibit V-3  
U.S. Domestic RPMs Versus Yield  
Quarterly Growth**



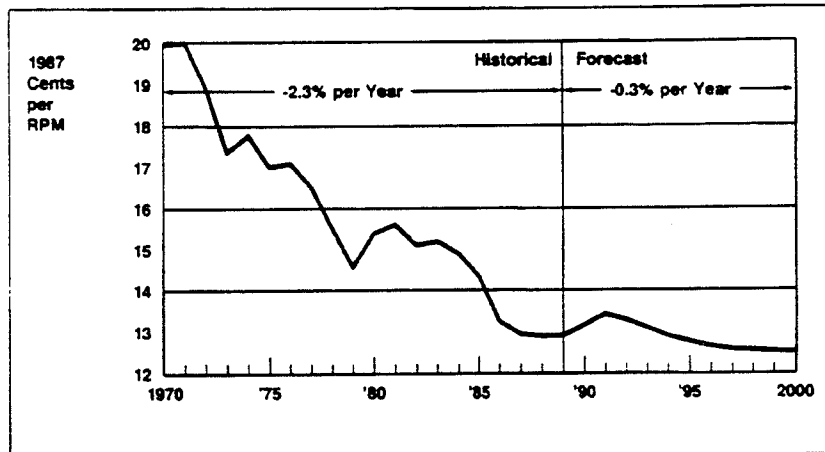
Source: Boeing Commercial Airplane Company.

### Exhibit V-4 U.S. Versus Non U.S. Airline Yields



Source: Boeing Commercial Airplane Company.

### Exhibit V-5 World Airline Yields



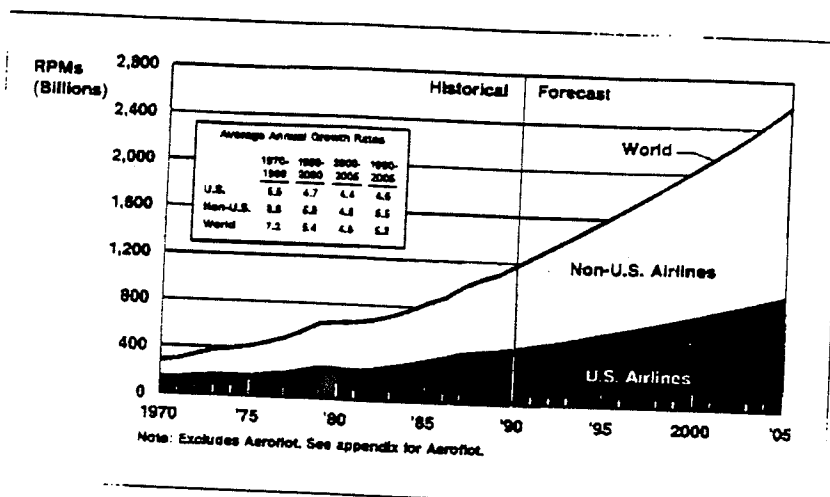
Source: Boeing Commercial Airplane Company.

### Projected Increases in Airline Traffic

World airline traffic, based on the anticipated growth in the world economy and on moderating declines in world airline yields, is projected to grow at an average of 5 to 7 percent per year over the coming decade. Exhibit V-6 graphically depicts Boeing's forecast

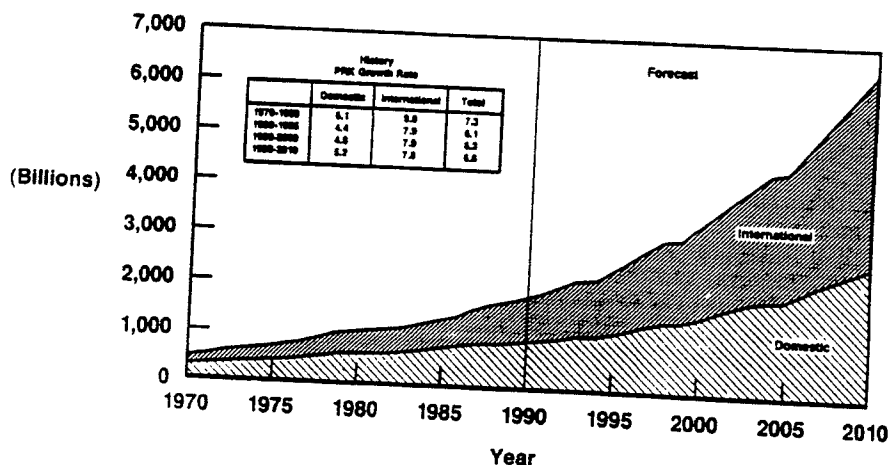
as well as historical industry growth trends. Exhibit V-7 depicts McDonnell Douglas forecast. (Note that Boeing and McDonnell Douglas aggregate categories of airline traffic on slightly different bases.)

**Exhibit V-6**  
**World Revenue Passenger Miles**  
**All Services**



Source: Boeing Commercial Airplane Company.

**Exhibit V-7**  
**Total World Passenger Traffic**  
**Revenue Passenger Kilometers**



Source: McDonnell Douglas.

Domestic growth in the United States, the world's largest and most well-developed air transportation market, is expected to be somewhat lower than the world average; most forecasts put it in the range of 4 to 5 percent per year, although the McDonnell Douglas forecast, shown in Exhibit V-8, through 2010 projects North American traffic growth at a significantly higher rate.

**Exhibit V-8**  
**Long-Term World Passenger Traffic Growth**

Region	Annual Percent Change		
	1969-1979	1979-1989	1989-2010
North America	8.3	4.9	5.8
Latin America	12.8	3.4	7.3
Western/Eastern Europe	11.2	5.3	6.0
Middle East	18.5	1.3	4.8
Africa	11.7	3.7	7.2
Asia/Pacific	15.9	8.6	9.4
USSR	7.0	4.1	2.6
World	9.9	5.3	6.5

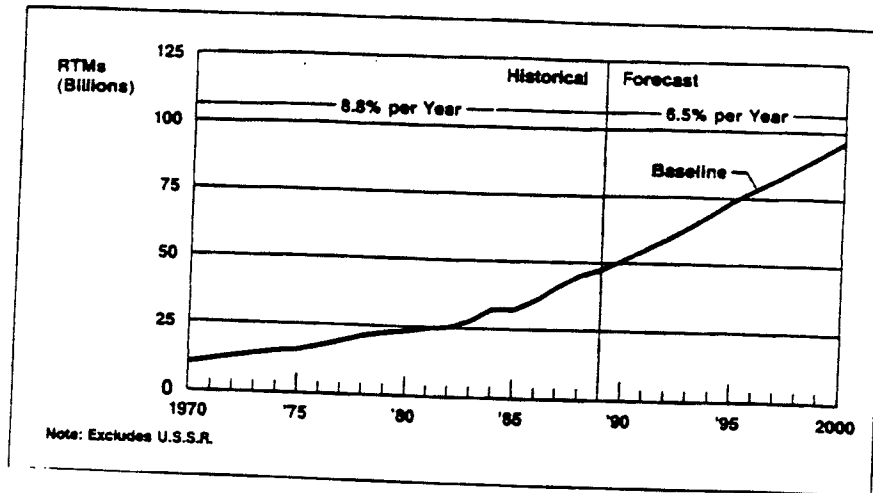
source: McDonnell Douglas

In addition to the generally positive prospects for growth both worldwide and in U.S. domestic markets, Northwest stands to benefit substantially from the even higher levels of economic and traffic growth forecast for Asia, where it has a well established market position and extensive route system. As illustrated in Exhibit V-2, forecast economic growth rates in the Asia/Pacific region are substantially higher than those projected for other regions. As shown in Exhibit V-8, the higher rates of economic growth are expected to generate correspondingly faster rates of growth in passenger traffic for the Asia/Pacific region.

### **Demand for Air Cargo**

As in the case of passenger traffic, the demand for air cargo services is a function of both the level of economic activity and the price of air transportation. In addition, air cargo demand is stimulated by increases in the level and rate of growth of international trade, by changes in production methods (e.g., just-in-time manufacturing), and by increases in the cost of capital which increase the cost of maintaining inventories. As shown in Exhibit V-9, the demand for air cargo is expected to increase at a rate equal to or greater than that projected for passenger traffic.

## Exhibit V-9 World Air Cargo Forecast Freight and Mail



### Possible Constraints on Future Economic Growth

Several factors could constrain future economic growth, including unusually severe economic conditions, oil prices, and infrastructure constraints.

The economic growth and traffic projections described in the preceding sections assume that the world economy will experience "normal" cyclical fluctuations of growth and recession. Those forecasts do not anticipate a major worldwide depression or other economic cataclysm. We do not believe such an event is probable, but if one should occur, it could be expected to depress traffic growth below forecast levels.

Sharp increases in oil prices adversely affect both the demand for air transportation and the cost of air travel. Higher oil prices depress airline demand by slowing world economic growth which, in turn, leads to even more pronounced slowdowns in the growth of air traffic. At the same time, higher oil prices translate directly into higher airline costs and, ultimately, to increases in the cost of air travel relative to other goods and services in the economy. Since fuel costs are a significant fraction of total airline operating costs, oil prices have a particularly large impact on the industry. Barring a major disruption of supplies from the Middle East, we believe that oil and jet fuel prices will rise at or slightly above the levels of inflation over the next two decades. Moreover, even modest increases in fuel prices are likely to be offset by improvements in fuel efficiency and productivity resulting from fleet modernization.

Infrastructure constraints may pose the most serious threat to the future growth of commercial air services. Although the problem of airport and airway congestion in the

United States is currently limited to a handful of major airports, Europe and Japan are already plagued by widespread and severe capacity problems. With the projected increases in air travel over the next decade and the limited plans for infrastructure expansion, the severity of the congestion caused by inadequate infrastructure is likely to increase. The resulting flight delays will increase the costs of travel for both airlines and their customers. Nonetheless, because the major forecasts of air traffic growth have taken account of infrastructural constraints in their forecasts, we do not believe the existence of such constraints requires further changes in traffic projections.

Even if infrastructure constraints lead to increased operational restrictions, however, we believe that the impact on Northwest would be substantially mitigated as a result of its large slot holdings at the capacity constrained airports that are crucial to its operations; these airports include Narita (Tokyo), and Washington National. In addition to its position at these key slot-constrained airports, Northwest conducts a significant number of operations at other airports that could become capacity constrained; in the event limits are imposed at these airports, Northwest's existing operations are likely to be preserved through "grandfathering."

**Environmental Constraints.** Concern about adverse environmental impacts in general, and about aircraft noise in particular, also pose a potential threat to the growth of commercial air service. The possibility of noise-based operational restrictions is particularly acute at several large airports in major metropolitan areas. Indeed, strong political support from airports and local communities concerned about aircraft noise has already provided the impetus for the enactment of legislation that requires airlines to eliminate older, noisier aircraft from their fleets over the next decade.

Concerns over noise pose a potential threat to commercial air services in two additional respects. First, they can lead to the imposition of curfews or other measures that interfere with the economic operation of commercial aircraft fleets. Second, community concerns about noise have become a major barrier to the expansion of existing airports and to the construction of new facilities.

Notwithstanding these concerns, however, we do not believe environmental constraints will depress the growth in airline traffic below the forecast levels described above. We base this conclusion on three principal reasons. First, the impact of environmental protection measures has already been factored into those forecasts. Second, the legislation that requires airlines to eliminate noisy aircraft from their fleets by the end of the century also restricts the ability of state and local authorities to impose more restrictive requirements. Finally, the fleet modernization programs now underway at most major airlines will reduce both the single event noise levels and the size of the noise impacted area adjacent to airports. As a result, it should be possible for airlines to increase the level of operations while maintaining the noise impact at or below current levels.



## **The Impact of Deregulation on the Airline Industry**

The airline industry has been transformed by deregulation. From an industry of many airlines each operating a series of largely disjointed routes on which competition was either nonexistent or strictly limited, the industry today is increasingly characterized by the emergence of a small number of mega-carriers, each operating an extensive route network of domestic and, increasingly, international routes, emanating from a core of hubs. The result is an industry with fewer but substantially larger carriers that compete with each other for traffic in an expanding number of city pair markets.

From the passage of the Civil Aeronautics Act in 1938 until enactment of the Airline Deregulation Act of 1978, the U.S. Civil Aeronautics Board regulated U.S. domestic airlines like public utilities strictly limiting competition by controlling entry, pricing, and route selection. Once able to obtain operating authority, carriers effectively enjoyed franchises to serve certain specified markets but not others. Both actual and potential competition were strictly limited. Prices were set on the basis of overall industry profitability rather than the relationship of fares and costs in specific markets. Although the Civil Aeronautics Act did not preclude price competition, in practice the CAB severely constrained such competition.

As the trunk airlines those initially licensed by the CAB in the late 1930s gradually acquired larger, longer range aircraft (DC-3s to DC-6s and Constellations to B-707s, DC-8s, etc.), the CAB permitted these carriers to serve the types of longer haul routes better suited to the new aircraft. The CAB then authorized local service or "feeder" airlines to serve the shorter haul routes abandoned by the trunks with other smaller capacity hand-me-down equipment no longer utilized by the trunks. Over time, as "feeders" acquired larger equipment and routes, the CAB permitted third-level air taxis to provide service over routes such as Harrisburg-Pittsburgh which were too small for (or otherwise unserved by) the larger airlines. Today's U.S. commuter airlines are the direct descendants of those third-level carriers.

The integration of three levels of carrier services into a national air transportation system was carried out by means of CAB route awards to trunks and feeders. Third-level carriers operating small aircraft were generally exempt from CAB route and rate regulation. The basic notion was that trunks would carry the vast majority of the traffic on their services between major traffic generating points. For passengers originating in and/or destined to smaller cities, second-level carriers would carry them or transfer them to/from those points into the trunk system. Third-level carriers were expected to fill any remaining gaps with small equipment.

Historically, the trunk airlines have dominated the U.S. airline industry. For most of the 1970s, 11 trunks collectively held 88 percent or more of the U.S. domestic passenger market. Although the CAB permitted two carriers to serve the same route in some cases,

most routes were monopolies. Only one U.S. airline - United - had a route structure extensive enough to approach a truly national status. Most U.S. airlines had, in reality, a crazy quilt of route rights which often had little or no resemblance to an economically efficient route structure.

Trunks also dominated in the U.S. international market. One, Pan American, operated exclusively international services and held virtually worldwide operating authority. Three other trunks held international authority (not counting transborder services to Canada and Mexico): TWA had rights to serve a number of destinations in Europe; Northwest held rights to Japan and points in Asia; and Braniff held rights to serve Latin America. International traffic accounted for about 10 percent of the total passenger traffic carried by U.S. airlines.

The 40 year reign of the Civil Aeronautics Board ended with the passage of the Airline Deregulation Act of 1978 (A.D.A.). For air cargo, deregulation came a year earlier. The A.D.A. dismantled the system of economic regulation under which U.S. airlines had operated. Regulation of the industry was explicitly left to the forces of marketplace competition. (Regulation of safety matters was retained under the U.S. Federal Aviation Administration.)

The elimination of entry, pricing, route and other restrictions which prevented or impaired competition in U.S. domestic airline markets transformed the U.S. air transportation industry. Once freed from CAB control, airlines radically realigned their route structures, explored dramatically new pricing strategies, adjusted their aircraft fleets, developed a range of new competitive weapons including computerized reservations systems and frequent flier programs, and consummated a rash of mergers and acquisitions. Several of the more significant changes precipitated by deregulation are examined below.

### **Route Systems**

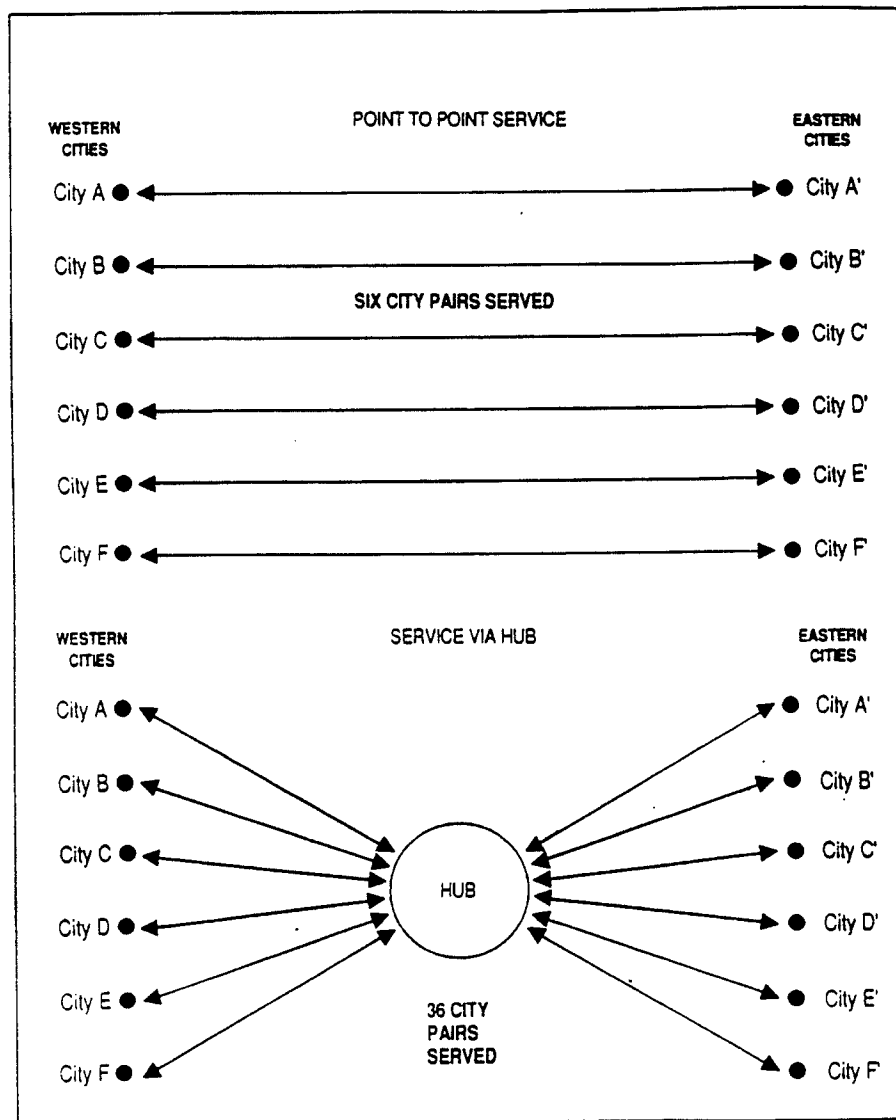
Deregulation set-off a dramatic change in airline route structures and service patterns. Perhaps the most dramatic change has been the rapid growth of hub and spoke operations by U.S. airlines.

Hubbing, a process by which an airline operates "banks" of arrivals and departures at selected airports, allows passengers (and cargo) to move conveniently between connecting flights on the same carrier with a minimum of delay. By flowing passengers from many points through an intermediate connecting point (i.e., a hub), an airline can combine passengers with different origins and destinations and thereby increase the number of city-pairs served (see Exhibit V-10) as well as the average number of passengers (and revenue) per flight.

Hub systems permit airlines to combine on a single flight not only passengers destined to a connecting hub but also those traveling to numerous other destinations beyond the hub. As

a result, hub systems make it possible for airlines to provide more frequent service to more points that was possible with the linear route systems used prior to deregulation. Because the value of a hub to both travelers and the hub operator increases — over a substantial range — with its size and scope (i.e., more flights to more points), airlines have strong incentives to develop large hubs serving an extensive array of destinations. Except for a few of the largest cities, however, the combination of local and connecting traffic is insufficient to support more than a single airline hub operation.

### Exhibit V-10 Leverage of HUB Connections



A successful hub does not require a large local population base. Charlotte, North Carolina, for example, enplanes approximately 1.25 percent of total U.S. enplanements with only 0.40 percent of the U.S. population. TWA's operations at St. Louis' Lambert International Airport provide an excellent example of the economic advantages of hubbing.

Exhibit V-11 is a flight matrix extracted from TWA's schedule at the St. Louis hub which illustrates the connecting bank of flights moving through the hub and onward to their final destinations. By scheduling banks of arriving and departing flights within a small "window" of time, TWA is able to maximize the number of connecting flights — and, hence, services — available to its customers. Thus, a single flight (155) can provide on-line connections from Chicago to 33 destinations.

**Exhibit V-11**  
**Matrix of TWA Flight Connections Through Its St. Louis Hub**

Flight	Origin	St. Louis Hub			Destination
		Arrive	Connect with	Depart	
155	Chicago 9:45 am	10:48 am	7011	11:30 am	Lake of the Ozarks
			7045	11:35 am	Springfield, MO
			7023	11:35 am	Columbia, MO
			7053	11:40 am	Joplin
			419	11:45 am	Las Vegas
			123	11:50 am	Albuquerque
			561	11:50 am	Denver
			131	11:50 am	Oklahoma City
			509	11:50 am	Phoenix
			155	11:50 am	Tucson
			27	11:50 am	Tulsa
			489	11:55 am	Little Rock
			273	12:00 noon	Colorado Springs
			91	12:00 noon	Los Angeles
			221	12:00 noon	San Antonio
			177	12:00 noon	San Francisco
			405	12:00 noon	Wichita
			451	12:05 pm	Austin
			451	12:05 pm	Dallas/Ft Worth
			525	12:05 pm	Houston
			259	12:05 pm	Omaha
			245	12:05 pm	Salt Lake City
			7032	1:15 pm	Carbondale, IL
			335	1:16 pm	Des Moines
			168	1:30 pm	Atlanta
			20	1:30 pm	Nassau/Freeport
			528	1:30 pm	Pittsburgh
			892	1:30 pm	Washington National
			208	1:45 pm	Memphis
			406	1:45 pm	Nashville
			590	1:50 pm	Baltimore
			30	1:55 pm	Louisville
			18	1:55 pm	San Juan, PR

Source: TWA Flight Guide.

The elimination of government restrictions on airline entry and route selection coupled with the underlying economics of hub and spoke operations have heightened the importance of — and competition for — traffic to support hub and spoke operations. In an effort to increase the effectiveness of their hubs and to offer a wide array of on-line services to attract customers, U.S. airlines have aggressively sought new traffic sources.

Thus, large U.S. airlines have expanded operations out of existing hubs, established new hubs in places such as Salt Lake City, Nashville, Raleigh-Durham and Cincinnati, acquired other airlines with existing hub and spoke operations, and acquired effective control over the small regional airlines which serve thin routes (i.e., those with light traffic) to and from the major carrier hubs. As shown in Exhibit V-12, the result has been a substantial increase in the percentage of air travelers that fly their complete journey on line (i.e., on a single airline). Concomitantly, the percentage of travelers interlining between airlines has declined.

Likewise, multihub route networks appear to generate important economic advantages for airlines. Among others, it permits more efficient utilization of both capital (principally aircraft) and labor. In addition, multiple hubs permit an airline to offer more service in many important connecting markets; for example, American Airlines can offer a full daily schedule of West Coast service from Boston, New York, and Washington by combining nonstop services with one-stop and connecting services through its hubs in Chicago and Dallas. United can do the same via its hubs at Chicago and Denver, but with only a single domestic hub at St. Louis, TWA finds it difficult to match the full schedule array offered by its larger rivals.

**Exhibit V-12**  
**Decline of Interlining on U.S. Domestic Scheduled Services (%)**

	<b>On-Line</b>	<b>Interline</b>
1973	77.1	22.9
1974	76.7	23.2
1975	76.4	23.6
1976	76.0	24.0
1977	75.4	24.6
1978	76.8	23.2
1979	78.9	21.1
1980	81.9	18.1
1981	84.6	15.4
1982	87.1	12.9
1983	89.1	10.9
1984	89.6	10.4

**Source:** Interline Practices in the Airline Industry, U.S. Department of Transportation, January 1986.

## **Computerized Ticketing and Reservations Systems**

The proliferation of, and rapid changes in, fare types, levels, and conditions since deregulation has complicated immensely the task of marketing airline services. One result has been the increased importance of travel agents in airline distribution systems. In the United States today, for example, the vast majority of all airline tickets are written by travel agents.

As both passengers and airlines increased their reliance on travel agents to handle their reservations and ticketing requirements, an airline's ability to effectively access travel agencies became a critical competitive variable. To strengthen and expand their access to travel agencies, several airlines developed computerized reservation systems (CRS) which automated many travel agency functions and reduced an agency's unit costs for booking reservations and issuing tickets.

Large economies of scope, the cost of developing such systems, and the difficulty of getting travel agents to switch systems appear to preclude a large number of CRS vendors. Of the top six U.S. airlines, each owns all or part of a major CRS.

Major airlines have also been able to use the data generated by their CRS networks to develop sophisticated yield and inventory management (seat allocation) capabilities. As a result, major airlines have introduced a host of capacity controlled fares, each subject to different conditions, and all tailored to generate traffic without diverting higher fare, on-demand traffic to the lower fare offerings.

A CRS can also generate valuable information regarding travel agency bookings. Such information can be used to develop marketing programs aimed at inducing travel agencies to book more reservations on flights offered by an airline.

## **Frequent Flier Programs**

Frequent traveler programs have proven to be extremely effective marketing tools in the deregulated U.S. air services market. These programs seek to develop "brand loyalty" among airline passengers by rewarding travelers with bonuses based on mileage flown and fare paid. To encourage loyalty, these programs provide larger bonuses the greater the travel credits accumulated. Since the bonuses accrue as nontaxable income to the individual traveler (not to the employer who paid the ticket), these programs also reduce the business traveler's incentive to utilize other airline's services even if those services are less expensive.

The more extensive a carrier's route system, the easier it is for travelers to earn bonuses. In addition, the prospect of free flights becomes more attractive the greater the number of destinations to which the free travel can be used. This characteristic makes frequent traveler programs particularly advantageous to larger airlines which serve extensive route

systems and offer numerous destinations. The success of such programs in attracting the patronage of high-frequency travelers fuels further expansion of services via existing and new hubs.

### **Overall Impact of Deregulation on Passenger Airlines**

The U.S. airline industry structure which has emerged from a decade of deregulated competition is characterized by the development of a more than small number of truly national, increasingly international single carrier air transportation networks. These multihub networks appear to produce the type of large economies of scale and scope which often characterize multiproduct firms. To expand their networks, major airlines are extending their control to include the small aircraft operations which provide service to their hubs from "thin" traffic points. Through acquisition and internal growth, a handful of U.S. megacarriers, each with national — and increasingly international — route networks emanating from its domestic hub(s), now dominate the U.S. airline industry.

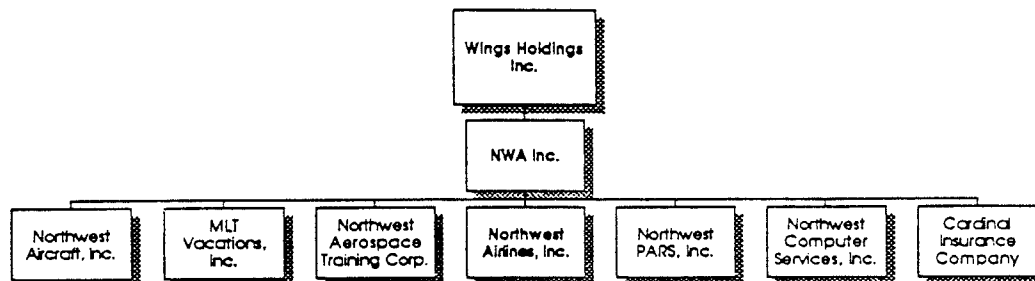
## VI. Northwest Airlines Current Position

This chapter describes the current competitive and financial condition of Northwest Airlines and its affiliated entities, NWA Inc. and Wings Holdings Inc. The following sections describe Northwest's route structure, fleet, market strength, management team, financial condition and competitive position in the industry.

### Northwest Airlines Corporate Structure and Ownership

Northwest Airlines must be considered as three hierarchical companies, Northwest Airlines, which is a subsidiary of NWA Inc. (the pre-buyout holding company), which in turn, is a subsidiary of Wings Holdings Inc. (the post-buyout holding company). Because Wings Holdings Inc. fundamentally holds only companies affiliated with the operations of the airline, it is the relevant entity for evaluating the financial condition of the airline. The entities, other than Northwest Airlines which are consolidated into NWA Inc. include MLT Vacations Inc., a tour wholesaler, Northwest Aerospace Training Corp., a training company, Northwest Aircraft Inc., an aircraft trading and leasing entity, Northwest PARS Inc., the computer reservation system interests, Northwest Computer Service Inc., a computer services entity, and Cardinal Insurance Company, which provides self-insurance for Northwest. The latter two entities are quite small. The organization for Northwest Airlines and its affiliate companies is shown graphically in Exhibit VI-1.

**Exhibit VI-1**  
**Northwest Airlines and Related Entities**



As a certificated carrier, Northwest Airlines as an entity is required to report financial results periodically to the Department of Transportation (who continued the Form 41 reporting requirements of the former Civil Aeronautics Board). These results, do not reflect the impact of a significant element of long-term debt which is recorded at the NWA Inc. level. As a result, publicly reported figures for Northwest Airlines may not match those cited in this report at the Wings Holdings, Inc. level.

Wings Holdings Inc. has several shareholders, for both common and preferred equity, as shown in Exhibit VI-2. The Series A preferred stock is a 14% preferred issue which pays cash dividends and is redeemable after 10 years. The Series B preferred stock is also 14% preferred, but accrues its dividends in additional shares. No dividends have been paid on common equity.



## Exhibit VI-2 Northwest Airlines (Wings Holdings Inc.) Shareholdings

	Common Shares	Preferred Stock		Board Seats
		Series A	Series B	
Checchi Group	45%	0%	0%	7
Elders Finace Group	14%	0%	25.20%	2
Blum & Associates	10%	0%	25.20%	2
KLM Royal Dutch Airlines	20%	100%	24.40%	3
Bankers Trust Co.	11%	0%	25.20%	1
Total	100%	100%	100%	

The only outstanding common stock options are for senior management, and amount to approximately 1,500 shares at varying strike prices. These options were provided as a part of the executive compensation programs in 1989 and 1990. No single manager has options for more than 1% of the common equity of the corporation, and Messrs. Checchi, Malek, and Wilson hold no options.

### Northwest Airlines Current Financial Position

Northwest Airlines, at the consolidated Wings Holdings, Inc. level, is a thinly capitalized company, as illustrated in the Wings Consolidated Comparative Balance Sheets for July 31, 1991 (unaudited), December 31, 1990 and December 31, 1989 in Exhibit VI-3. Retained earnings for the firm show a deficit of nearly \$600 million as of July 31, 1991, reflecting significant losses during the last year during the Gulf War crisis and economic recession. With only a small equity position, long term debt to equity ratios for the company are quite high, in excess of 20:1.

Income Statements for Wings Holdings Inc. showing year to date results through June 30, 1991 (unaudited) and annual results for 1990 and the post buy-out period of 1989 are shown in Exhibit VI-4. Year to date, pre-tax losses for Wings Holdings, Inc. as of July 31, 1991 amount to \$263.9 million, and compare to \$152.1 million in losses for the comparable first seven months of 1990.

Statements of Cash Flow for Wings Holdings, Inc., showing year to date results through June 30, 1991 (unaudited) and annual results for 1990 and the post buy-out period of 1989 are shown in Exhibit VI-5. The July 31, 1991 results indicate a net cash usage of \$174.5 million during the first 7 months of the year. Operations provided cash of \$149.8 million during that period.

The current financial condition of Northwest and its affiliates has been influenced by the Gulf War and industry conditions, which engendered record losses for the industry. The U.S. airline industry lost more than \$4 billion in 1990, and more than \$1 billion

## Exhibit VI-3

## Wings Holdings Inc. Consolidated Balance Sheet

source: Wings Holdings Inc. Note 1991 statement is unaudited

\$ in millions

	Dec. 31, 1989	Dec. 31, 1990	Jul. 31, 1991		Dec. 31, 1989	Dec. 31, 1990	Jul. 31, 1991
ASSETS				LIABILITIES AND EQUITY			
Cash and Cash Equivalents	307.2	187.1	12.6	Short-Term Borrowings	0.0	20.1	40.3
Short-Term Investments	37.0	13.3	23.2	Accts. Payable & Other	1085.4	1274.1	1319.9
Accounts Receivable - Net	559.1	638.5	678.3	Air Traffic Liability	497.4	498.9	605.6
Flight Equipment Spare Parts - Net	145.9	193.0	193.6	Total Current Liabilities	1582.8	1793.1	1965.8
Prepaid Expenses and Other Current Assets	139.5	178.6	160.6				
Total Current Assets	1188.7	1210.5	1068.3	Long-Term Debt	2968.3	2471.9	2782.6
Owned Property - Net	4195.3	4209.9	4581.8	Capital Leases	577.7	1000.4	970.2
Capital Leased Property - Net	479.7	902.8	878.5	Deferred Income Taxes	1296.8	1240.9	1149.4
Total Property and Equipment	4675.0	5112.7	5460.3	Other Liabilities	256.6	824.7	862.3
Investments in Affiliated Companies	201.6	187.6	187.3	Redeemable Preferred Stock	507.1	486.0	502.0
International Route Authorities - Net	894.8	836.3	832.8	Common Equity (Deficit)	165.9	(153.3)	(372.2)
Prepaid Expenses & Other Assets	395.1	316.6	311.4	Total Shareholders Equity	673.0	332.7	129.8
Total Other Assets	1491.5	1340.5	1331.5				
TOTAL ASSETS	7355.2	7663.7	7860.1	TOTAL LIABILITIES AND EQUITY	7355.2	7663.7	7860.1

Note: As of 12/31/90, Wings Holdings Inc. had non-cancellable operating lease commitments as follows: (\$000)

1991	361,904
1992	359,451
1993	334,787
1994	314,006
1995	297,956
Thereafter	4,102,001

**Exhibit VI-4**  
**Consolidated Statement of Operations**  
**Wings Holdings Inc.**  
 results for 1991 are unaudited  
 \$ in millions

	2/23-12/31 1989	Year Ended 12/31/90	1/1-7/31 1991
<b>Operating Revenues</b>			
Passenger	2,486.2	6,335.0	3,601.2
Cargo	307.0	655.4	371.4
Other	131.5	436.0	348.1
Total Operating Revenues	<b>2,924.7</b>	<b>7,426.4</b>	<b>4,320.7</b>
<b>Operating Expenses</b>			
Salaries and Benefits	823.4	2,153.3	1,328.2
Fuel, Oil and Taxes	476.8	1,412.9	712.6
Commissions	444.7	1,192.2	725.2
Depreciation and Amortization	148.9	373.0	211.7
Other	931.0	2,430.0	1,423.4
Total Operating Expenses	<b>2,824.8</b>	<b>7,561.4</b>	<b>4,401.1</b>
<b>Operating Income (Loss)</b>	<b>99.9</b>	<b>(135.0)</b>	<b>(80.4)</b>
<b>Other Income (Expense)</b>			
Interest Expense - net	(182.6)	(339.9)	(195.4)
Other - net	58.1	9.7	12.0
<b>Loss Before Income Taxes</b>	<b>(24.6)</b>	<b>(465.2)</b>	<b>(263.8)</b>
<b>Income Tax Benefit</b>	<b>(14.5)</b>	<b>(162.7)</b>	<b>(91.2)</b>
<b>Net Loss</b>	<b>(10.1)</b>	<b>(302.5)</b>	<b>(172.6)</b>

**Exhibit VI-5**  
**Consolidated Statements of Cash Flow**  
**Wings Holdings Inc.**

\$ in millions

	2/23/89 - 12/31/89	Year Ending 12/31/90	1/1/91 - 7/31/91
<b>Cash Flows from Operating Activities</b>			
Adjustments to reconcile net loss to net cash provided by operating activities			
Net Loss	(10.1)	(302.5)	(172.6)
Depreciation and Amortization	148.9	373.0	211.7
Changes in Working Capital	138.7	142.0	60.0
Other	(107.3)	(19.9)	50.7
<b>Net Cash Provided by Operating Activities</b>	<b>170.2</b>	<b>192.6</b>	<b>149.8</b>
<b>Cash Flows from Investing Activities</b>			
Payment for NWA shares, net of cash acquired	(3,368.8)	0.0	0.0
Additions to property and equipment	(252.0)	(772.6)	(445.6)
Other investing activities	(111.3)	28.7	(90.1)
<b>Net Cash Used in Investing Activities</b>	<b>(3,732.1)</b>	<b>(743.9)</b>	<b>(535.7)</b>
<b>Cash Flows from Financing Activities</b>			
Proceeds from financing activities	4,405.9	2,022.3	281.4
Payment of financing obligations	(536.8)	(1,591.1)	(70.0)
<b>Net Cash Provided by Financing Activities</b>	<b>3,869.1</b>	<b>431.2</b>	<b>211.4</b>
<b>Increase (Decrease) in Cash and Cash Equivalents</b>	<b>307.2</b>	<b>(120.1)</b>	<b>(174.5)</b>
Cash and Cash Equivalents, beginning of period	0.0	307.2	187.1
Cash and Cash Equivalents, end of period	307.2	187.1	12.6

during the first half of 1991. The post-Gulf War rebound expected for the industry has been slowed by economic recession. Nonetheless, Wings Holdings, Inc. was profitable in June, July, and August of 1991, hopefully indicating the beginning of a return to more normal conditions. Although the industry is recovering, the recovery has been delayed until the beginning of the traditionally weaker winter months, and additional monthly losses are likely for Northwest and other airlines during the winter season.

Northwest has considerable hidden value in its asset base (as discussed below), marketable assets, and access to more than \$600 million in credit lines which should allow it to survive in a short-term crisis. This position, which is weaker than that of its three major competitors, could make Northwest more vulnerable to events beyond its control, such as a sustained fuel crisis or prolonged industry fare war. Even if the high loss levels during the Gulf War were to continue, Northwest's credit reserves theoretically could sustain the carrier for 2-3 years. Northwest would likely survive one major industry crisis without having to resort to asset sales or downsizing the airline, even if performance remains at below industry average yields (revenue per passenger mile) and higher costs per available seat mile.

As a highly leveraged transaction, Northwest is positively regarded by Bankers Trust, its lead bank for the leveraged buy-out debt, currently at \$1.4 billion, and the \$600 million line of credit (presently unused). The LBO debt, the credit line, and a \$500 million loan from Airbus Industrie and CFM International share a long list of covenants, among which are debt to equity and fixed charge coverage ratios. These two ratios are presently very close to their default point, and there is a potential that Northwest could breach those covenants by year end should present trends continue. Those covenants would be subject to renegotiation with Bankers Trust and the bank group. Bankers Trust expresses positive support of Wings Holdings Inc., terming it one of the best performing highly leveraged transactions. While Bankers Trust indicated that it cannot speak for all of the syndicate banks, and while another industry catastrophe such as the Gulf War could create difficulties, they would be favorably disposed to relaxing those requirements based on recent discussions. The proposed financing transactions by the State and MAC will have a favorable impact on several financial ratios.

Often in an LBO transaction, undervalued assets are sold to pay down LBO debt and the organization is rebuilt from a smaller core. In the case of the Northwest transaction, the company has added a significant number of new aircraft (worth more than \$1.5 billion), acquired Honolulu-Sydney rights from Hawaiian Airlines, acquired the Washington National hub from the Eastern Airlines bankruptcy estate, and entered into a joint marketing agreement, including advancing debtor in possession financing, with America West Airlines. Northwest did sell and lease back a number of aircraft (which many carriers did during the same period to capture high market values for aircraft in the high 1989 market) and mortgaged a small parcel of Japanese Real Estate for \$379 million, but has not disposed of any significant airline assets or downsized, as often occurs in an LBO. These moves have added critical mass to the airline and are consistent with a strategy calling for continued long term growth.

Northwest has paid down \$1.673 billion of its LBO debt to date, the cash for which has come from the following sources:

Cash on hand / Cash from operations	\$ 588 million
Supplier Financings (primarily Airbus and CFM)	\$ 503 million
Tokyo Real Estate Financing	\$ 379 million
Aircraft Sale/Leaseback Financing	\$ 203 million

### **Northwest's Comparative Financial Position**

Northwest, as fourth largest U.S. carrier, is most often compared to the big 3, American, Delta and United. Exhibit VI-6 highlights some comparative data among the major carriers, including Northwest as publicly reported and Wings Holdings, Inc. at year end 1990. Northwest's Net Margin of -4.2% at the Wings Holdings, Inc. level, while significantly better than US Air, America West and TWA, trailed American, United and Delta. If the impact of the LBO debt (reported in the parent companies) is not considered, the comparative financial results for the operating entity appear quite favorable. The level of interest expense, which are at \$2,060 per employee at Northwest and rise to \$7,835 at Wings Holdings, Inc., represent the most significant difference between Northwest and its big 3 competitors.

In examining several productivity measures within the industry, Northwest has fewer employees per aircraft than the big 3, generates more revenue passenger miles per employee, but falls below industry average in terms of yield and cost per available seat mile. If Northwest had performed at industry average yields and costs in 1990, its operating results would have improved by \$1.05 billion in earnings, indicating the potential leverage in operation improvements yet to be achieved by the company.

If Northwest, without the NWA Inc. and Wings Holdings debt load, had operated its 77 billion available seat miles and 51 billion revenue passenger miles at the cost and yield structures of American, Delta and United during 1990, the differential impact on results would be as follows:

#### **Revenue increase (decrease)**

American	12.66 cent yield versus Northwest's 12.31 = \$ 180 million
Delta	13.82 cent yield versus Northwest's 12.31 = \$ 778 million
United	12.55 cent yield versus Northwest's 12.31 = \$ 124 million

**Exhibit VI-6**  
**Comparative Airline Financial Performance - 1990**

	AMR Corp.	Delta	UAL Corp.	TWA	US Air Group	Wings Hldgs.
Revenue (\$000)	11,719,600	8,707,400	11,037,477	4,606,082	6,558,606	7,426,429
Operating Expenses (\$000)	11,595,600	8,934,600	11,073,754	4,768,384	7,059,729	7,561,421
Operating Profit (\$000)	124,000	-227,200	-36,277	-162,302	-501,123	-134,992
Operating Margin - %	1.06	-2.61	-0.33	-3.52	-7.64	-1.82
Interest Expense-net (\$000)	221,200	58,400	120,905	302,818	225,600	339,919
Net Profit (\$000)	-39,600	-154,000	-200,645	-237,564	-454,448	-302,498
Yield (cents)	12.66	13.82	12.55	11.24	16.18	12.31
Cost per ASM (cents)	8.87	9.00	9.60	8.68	9.40	9.57
RPMs (000)	76,878,044	58,982,446	75,944,415	34,236,401	35,548,997	51,490,193
ASMs (000)	123,382,264	99,778,914	114,654,089	54,958,188	59,480,298	77,317,424
Load Factor (%)	62.31	59.11	66.24	62.30	59.77	66.60
Employees	87300	62900	75025	31798	44667	43386
Interest Burden per Empl. (\$)	2533.79	928.46	1611.53	9523.18	5050.71	7834.76
ASM per Employee	1,413,313	1,586,310	1,528,212	1,728,354	1,331,639	1,782,082
Employee per Aircraft	158	142	162	154	106	136

### **Cost decrease (increase)**

American	8.87 cent cost/asm versus Northwest's 9.57 = \$541 million
Delta	9.00 cent cost/asm versus Northwest's 9.57 = \$441 million
United	9.60 cent cost/asm versus Northwest's 9.57 = (\$ 23 million)

### **Total Impact**

Northwest operating at the cost and yield structures of competitors would have had the following improvements in operating results:

American	\$ 721 million in increased margin
Delta	\$ 1.219 billion in increased margin
United	\$ 101 million in increased margin

A clear potential for significant profit improvement is present at Northwest, and is being addressed by the new management team. The operating profit differential from a small movement in costs and yields is significant, and could significantly impact earnings in future years if successful. The leverage in yields and costs cuts both ways, however, and lower yields and higher costs have similar impact in the opposite direction.

### **Northwest's Competitive Position**

Northwest's competitive position in the industry is dependent on a number of factors, including its route structure, fleet, market strength, management team, asset base, computer reservation system, customer service programs and marketing actions. Northwest's position today, and plans for future improvement, along with industry conditions and competitor actions, form the base for Northwest's future financial condition and ability to pay down debt.

Comments from Wall St. analysts were generally favorable. At the same time, these analysts were cautious due to the fact that full financial information is unavailable because the company is privately held. (Northwest Airlines files DOT reports but because debt is held at the parent company levels, the data are incomplete.)

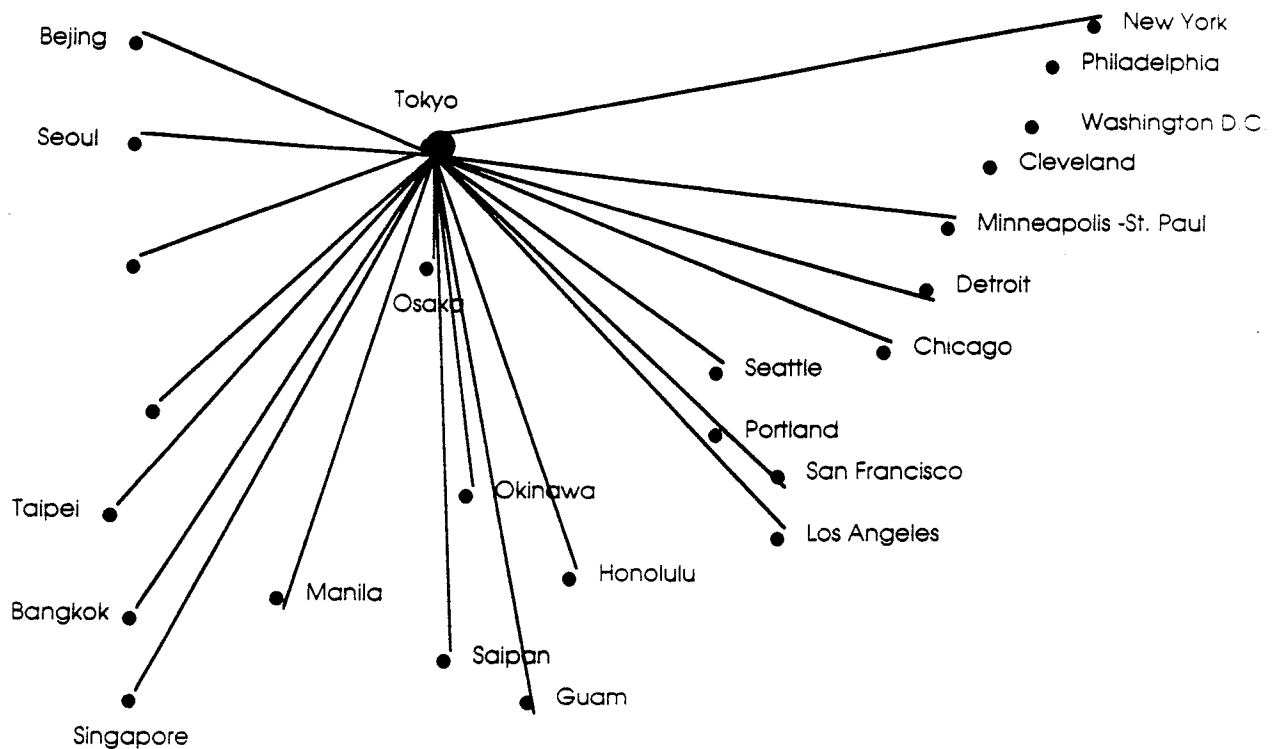
### **Route Structure**

Northwest Airlines has a long history and significant international route authorities in Asia, including a major hub in Tokyo, Japan. These rights include the ability to carry local traffic from Tokyo to other cities in Asia, including Seoul, Beijing, Taipei, Manila, Hong Kong, Bangkok, Kuala Lumpur, Singapore and other major destinations. Granted by treaty after World War II, they are grandfathered and provide Northwest (and United,

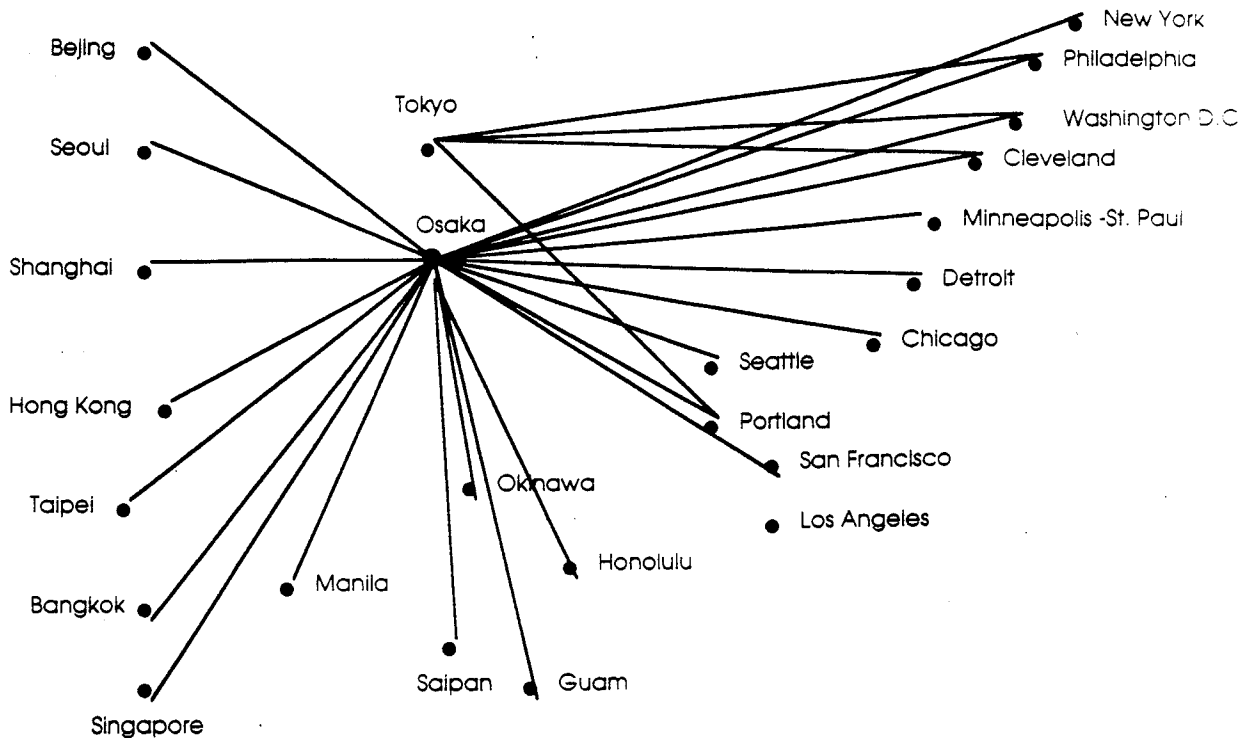


who purchased similar authority from Pan American World Airways) a strong position in the Japanese market. Northwest holds similar rights at Osaka, but is currently unable to fully utilize them because of airport constraints. With the opening of the new Kansai airport in Osaka in the mid 1990s, these rights could potentially be quite valuable. Recently, Northwest has entered the Australian market after acquiring Honolulu-Sydney rights from Hawaiian Airlines. This route, and forthcoming operations from Los Angeles and New York to Sydney, provide Northwest full coverage of the Pacific Basin. Exhibit VI-7 shows Northwest's current and Exhibit VI-8 Northwest's unused Pacific route authorities.

**Exhibit VI-7**  
**Northwest's Current Pacific Routes**



### Exhibit VI-8 Northwest's Unused Pacific Route Authorities



In the Atlantic, Northwest has a small presence, serving London's Gatwick airport, Glasgow, Paris, Frankfurt and Amsterdam, operating a mini-hub for European flights from Boston. This thin route structure in Europe is much smaller than those of United, Delta and American in terms of frequency and cities covered and is a small portion of Northwest's overall route system.

Domestically, Northwest dominates two major hubs in Minneapolis-St. Paul and Detroit. Northwest dwarfs other carriers in these cities, and operates many profitable routes with little or no direct competition. Northwest also has a modest southern hub in Memphis and has just opened a small hub in Washington D.C. The hub in Memphis, which is not as strong an origin-destination city as Atlanta, is not as successful as the northern hubs. It is premature to judge the success of the new Washington D.C. hub.

Northwest's domestic presence is geographically unbalanced, when compared to its competitors. Delta has a strong presence in the South (Atlanta), Southwest (Dallas) Northeast (Boston) and West (Salt Lake City) and has built a strong presence in Cincinnati. American is strong in Chicago and Dallas, and has hubs in Nashville, Raleigh-Durham, Miami and San Jose. United is strong in Chicago, Washington Dulles, Denver and San Francisco, and is building a southern presence in Orlando. To effectively compete with the "big 3", Northwest needs to expand its presence on the east and west coasts and in the Southwest.

Northwest's recent opening of Washington D.C. as a hub and the new marketing agreements with America West Airlines, which is based in Phoenix and has primarily a western route structure, should help Northwest build additional national presence.

Overall, Northwest has a good — but not great— domestic route system. We believe that to ensure its long-term viability, Northwest will need to develop a stronger route system and market presence across the southern tier of the United States and along the eastern seaboard. We also believe, however, that the continued economic problems plaguing a number of weaker carriers may provide Northwest with opportunities to significantly strengthen its route system in these regions.

### **Fleet**

Northwest currently operates 345 aircraft, and plans to grow the fleet to 509 aircraft by the year 2000. Northwest's fleet includes two wide body types today, the Boeing 747 (in -100, -200 and -400 variants) and the McDonnell Douglas DC-10 (in -30 and -40 variants). Two additional wide body aircraft types are on order, the Airbus A-330 (twin engine for domestic and international service) and the Airbus A-340 (four engine long-range international service). Northwest's narrow body fleet includes the advanced technology Airbus A-320, the Boeing 757 as well as older Boeing 727 and Douglas DC-9 models (including -10, -30, -40, -50 and -80 variants). By the late 1990s, Northwest plans to acquire a number of "new 110 seat" aircraft to replace DC-9 models which do not meet stage 3 noise requirements.

At the end of 1990, 114 of Northwest's 332 aircraft (34%) met stage 3 requirements. By 1995, 276 of 426 aircraft will meet stage 3 (65%), and by 1999, 409 of 509 will meet stage 3 requirements. Northwest's 37 Boeing 727s and a portion of the Douglas DC-9 fleet will need modification to meet stage 3 noise requirements to continue to operate after the year 2000, at an estimated cost of \$2-3 million per aircraft in 1991 dollars.

In addition, older models of the 747, DC-10, 727 and DC-9 will likely require additional aging aircraft modifications as they reach critical points in their service lives. Structural repair and corrosion control provisions require upwards of \$1 million per aircraft, underscoring Northwest's need for maintenance capacity as its fleet ages.

Northwest is also the only U.S. based passenger carrier to operate dedicated freighters, (Boeing 747-200F) which allows the carrier to participate in the profitable international air freight markets in Europe and the Far East. Cargo capacity was a strong consideration in Northwest's selection of the Airbus A-330 and A-340 models over competing types, as they can accommodate side-by-side industry standard LD-3 containers in the cargo hold.

Our assessment of Northwest's fleet plan summarized in Exhibit VI-9 is that the fleet will be competitive as deliveries of the remaining A-320 and Boeing 757s are completed. With the exception of small jet aircraft (110 seat), Northwest's fleet should then be modern and current.

### **Market Strength**

Northwest's market strength is becoming more competitive with its big 3 competitors, but has not yet reached comparable levels.

Worldspan, the computer reservation system in which Northwest, Delta and TWA participate, is third in market share and has not reached the travel agency penetration of Sabre (American) or Apollo (United). Additionally, Northwest's lack of geographic balance has made Worldspan penetration more difficult in a number of markets, including both the east and west coasts.

Northwest has a competitive frequent flyer program although it has fewer members than its competitors, particularly in the South and Southwest. American's program, which was the first in the industry, has more members than Northwest's. United's program, which also has more participants, offers a much larger number of participating carriers to choose from in redeeming rewards, an attractive feature.

With a smaller size and presence, Northwest has less ability to influence travel agencies, and major corporate accounts and must work harder to secure a stable customer base outside of its dominant domestic hubs than American, United or Delta.

Northwest has also reversed its history of aloofness with respect to the Federal political establishment in Washington, D.C. Its new political ties should assist the company in getting a fair hearing in international route allocations.

### **Management Team**

Northwest's senior management team has changed significantly since the LBO transaction. Fifty of the seventy most senior managers are new to the organization, and additional managers have been hired at lower levels in the organization. Overall, our impression of the management team is favorable.

An upgrading of the financial function in several key positions has occurred. Several managers have been hired from other airlines, including American and United, and based

## Exhibit VI-9 Northwest Fleet Plan

<b>Aircraft Type</b>	<b>1991</b>	<b>Year 1996</b>	<b>1999</b>
Boeing 727	62	37	37
Boeing 747-100/200	32	32	32
Boeing 747F	8	8	8
Boeing 747-400	10	16	20
Boeing 757	33	62	95
Airbus A-320	20	100	120
Airbus A-330	0	10	16
Airbus A-340	0	20	24
Douglas DC-9	148	113	73
Douglas DC-10	28	28	28
New DC-9 replacement	0	0	56
<b>Total Aircraft</b>	<b>341</b>	<b>426</b>	<b>509</b>

on our discussions and interviews, a strong commitment to turning around the carrier exists among the management team. Stock options in Wings Holdings Inc. are awarded to Vice Presidents and above, based on performance, and provide a strong performance incentive.

Two characteristics of the new management team stand out. First, the team is young in age, and second, the team has set a wide agenda for aggressive improvements within the operation. The degree to which the team can quickly come together and implement cultural change throughout the organization will be a key determinant in Northwest's future success.

### **Northwest's Asset Base**

Northwest has a strong base of valuable assets, which, in a worst case, could be sold to pay down debt or generate cash. In addition to aircraft and flight equipment on the balance sheet, Northwest's international route authorities have considerable value. A recent appraisal of Northwest's fleet showed value in excess of the balance sheet of more than \$871 million. In addition, Northwest estimates of the value of route authorities in excess of book value by approximately \$4 billion. Several individual routes, such as Chicago-Tokyo, and New York-Tokyo, would be of particular interest to some of the "big 3" competitors, as they would complement existing route structures, and are quite salable. Additionally, a parcel of land at Tokyo's Narita Airport is owned by the company and is recorded at well below current market value on the books. While these values are not liquid, they indicate a substantial potential hidden value in the company.

Northwest management prepared a "current value" balance sheet at the end of 1990 reflecting their estimates of the current market value of assets. That balance sheet, along with the year end 1990 balance sheet for Wings Holdings Inc. are shown in Exhibit VI-10. While we are not in a position to provide a route by route appraisal of Northwest's international routes, we believe that a substantial hidden value of over book value exists. The realization of any or all of that hidden value will only be known if and when Northwest markets these authorities.

### **Northwest's Image and Customer Service**

In the last two years, Northwest's customer service has improved considerably, according to DOT statistics and surveys conducted for Northwest by independent firms which we reviewed. This area is a current focus of Northwest management. A launch of the "Northwest for the 1990s" is planned for later this year, highlighting many of the planned improvements in customer service, including reconfigured aircraft interiors, new passenger service standards, new crew uniforms, improved meal service, improved entertainment systems, and advanced baggage handling capabilities. Significant training expenditures, including more than \$9 million in the fourth quarter of 1991, will provide impetus to the new programs as Northwest attempts a cultural transformation to achieve its goal of becoming the most preferred airline.

## Exhibit VI-10

## Northwest Airlines Current Value Estimates of Wings Holdings Inc. Assets as of 12/31/90

Source: Northwest Airlines

Assets - Partial Schedule of Items with differences	Thousands of dollars		
	Book Value	Estimated FMV	Difference
Flight Equipment, Net (Owned, Capital Leased and Spare Parts)	3,446,249	4,758,235	1,311,986
Delivery Positions	518,247	2,736,000	2,217,753
International Route Authorities	836,294	5,155,178	4,318,884
Other	1,389,201	2,032,667	643,466
Total Assets	7,663,667	16,155,756	8,492,089

As shown in Exhibit VI-11, Northwest's on-time performance, ranks consistently higher than its major competitors. Exhibit VI-12, which shows airlines ranked by customer complaints, demonstrates that there is still considerable room for improvement.

Northwest has technologically leapfrogged its competitors in baggage handling through the introduction of automated baggage tag printers at its major ticket counters, and soon to be introduced at curbside for use by skycaps. This system, which automatically prints a baggage claim ticket to match the customers flight itinerary as stored in the reservations computer, eliminates agent mistakes in which the wrong city tag is attached to a passenger's luggage. In addition, the system prints the name of the customer on the baggage tag, aiding positive identification at the destination, and a bar code which ensures that the automated baggage handling system directs the bag to the proper flight. The system, now used for 40% of Northwest bags, has already reduced Northwest's lost baggage rate close to that of industry leaders, and should, when fully implemented, reduce lost luggage to a handful of bags per day. Exhibit VI-13 highlights Northwest's baggage mishandling performance ranking in the industry.

If Northwest's customer service initiatives are successful in differentiating the airline from its competitors and making Northwest a preferred carrier, yields and load factors should rise, providing a significant improvement in revenue.

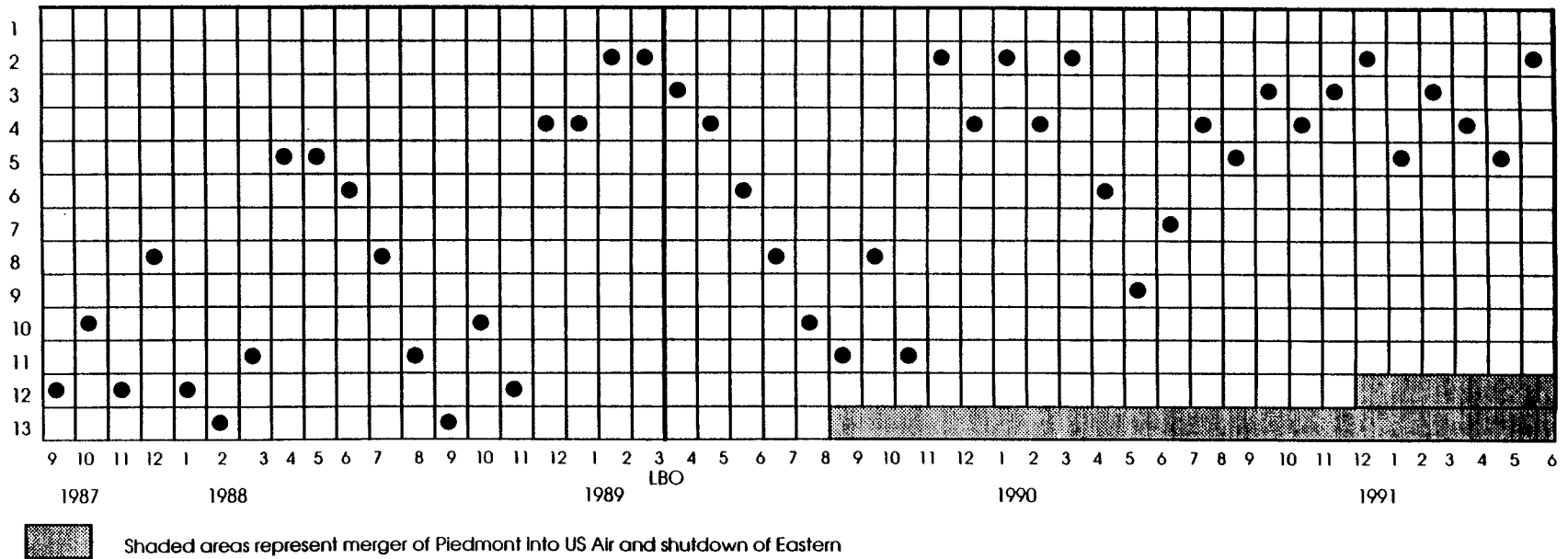
### **Computer Reservation Systems**

Northwest participates with Delta and TWA in Worldspan, a computer reservation system for travel agencies. While that system is currently third in both market share and in technological sophistication, behind American's SABRE and United's Apollo, its competitive position is improving both in market share and functionality. With technological and regulatory changes imminent which will allow "seamless availability", that is, an agent on one CRS can obtain "last seat availability" and on-line information from other CRS systems in the same manner as a user of their system, the relative advantage of one system over another is waning as a competitive tool. In addition, standard CRS contract periods have been reduced from 5 years to 3 years which allows travel agencies additional flexibility in switching CRS systems without paying liquidated damages to the CRS vendor for lost revenues. This is leveling the playing field in CRS marketing, and the importance of CRS as a strategic weapon is decreasing. (The "halo effect" of an agent booking a higher number of flights on the carrier supplying the CRS system he or she is working with still exists, but is waning somewhat as bias is removed from the systems).

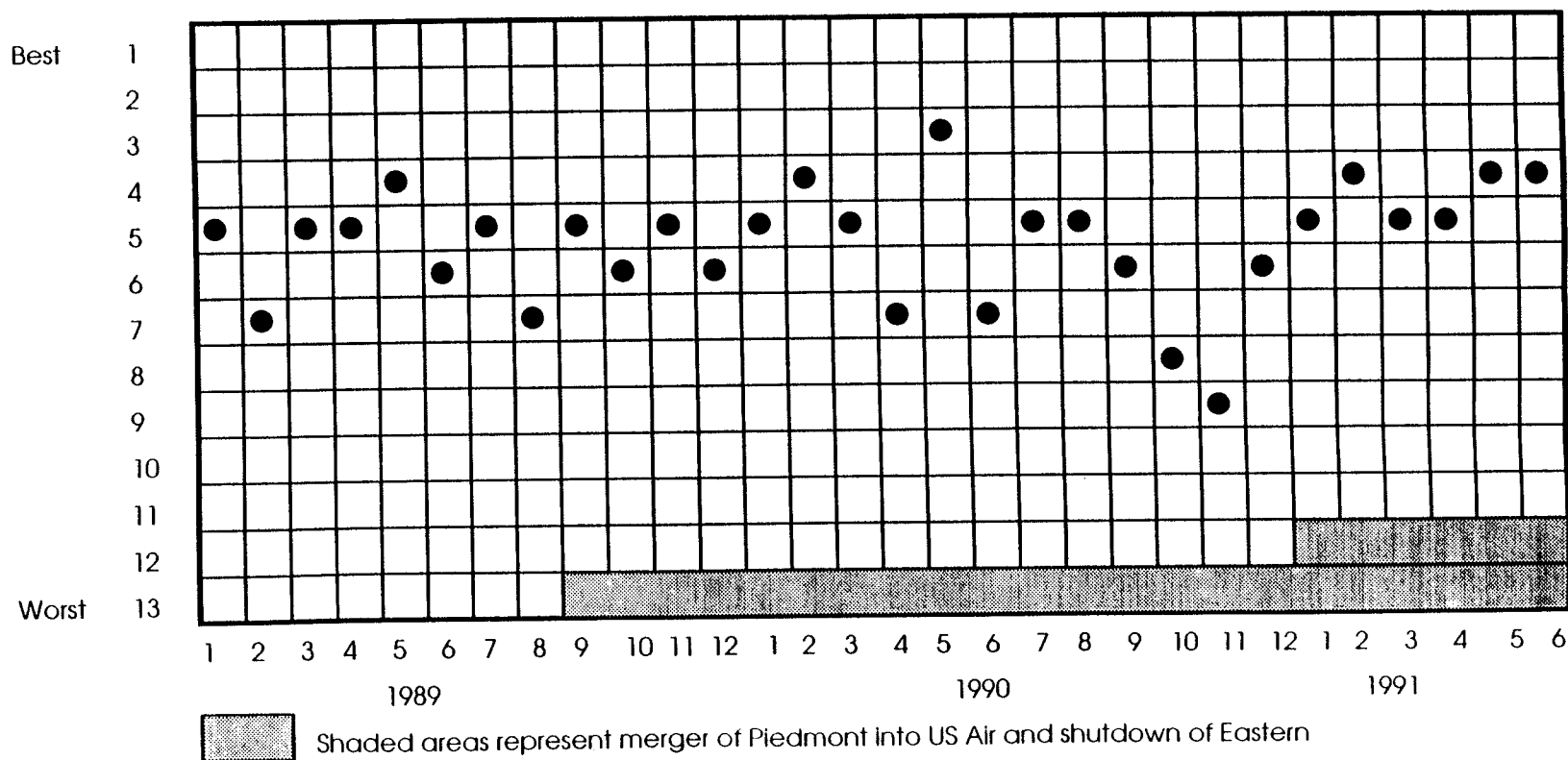
From a financial perspective, CRS systems charge a fee for each airline segment (flight) booked through their system. Generally, these fees are approximately \$1.85 per segment. American Airlines is a net beneficiary of segment fees, receiving more than it pays out. Northwest is a net payer of segment fees, and is likely to be so for the near future.



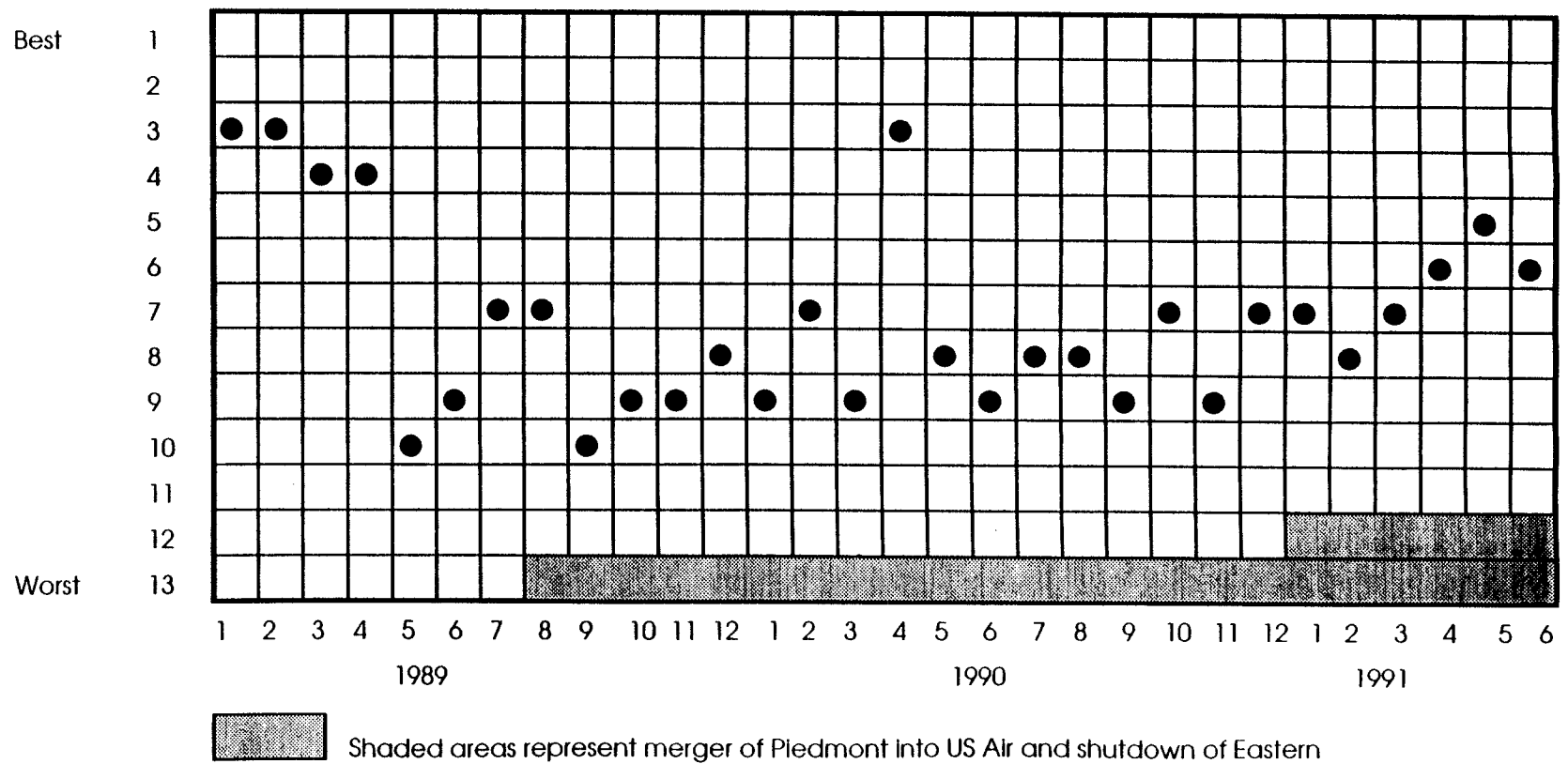
**Exhibit VI-11**  
**Northwest's On-Time Performance Rankings Among 13 Major Carriers**



# Exhibit VI-12 Northwest Customer Complaints Ranking Among 13 Major Carriers



# Exhibit- VI-13 Northwest Baggage Handling Ranking Among 13 Major Carriers



## **Marketing Directly to Corporations**

In an effort to build customer loyalty, many airlines are offering "corporate discounts" to key customers (and travel agencies). These special fares, unavailable to the general public, are called unpublished fares and are negotiated by the airline sales force and the corporate customer. Northwest's management, many of whom have experience in the hotel industry, are familiar with such pricing mechanisms and understand the dynamics of "corporate rates". These types of fares reduce yields, but build volume if corporations direct their travelers to the carriers on which they receive a discount. The difficulty with unpublished fares is that competitive actions are difficult to track, and difficult to price vis-a-vis competitors.

With a changes in the industry from marketing strictly to travel agencies to marketing to corporations — in conjunction with or separately from travel agents — the nature of airline marketing is changing. The degree to which Northwest can quickly adapt to the new market realities may significantly impact its profitability.

## **Northwest Today is at a Critical Juncture**

Northwest, being smaller and lacking the financial strength of its big 3 competitors, faces significant hurdles. Northwest management has recognized that growth is essential to match the scale economies of the big 3, and has negotiated several strategic expansions to its route structure. Additional acquisitions are being considered, some of a magnitude that might require a significant capital infusion. Management has firmly indicated that it would not attempt to grow without adequate capital resources on hand.

In repositioning itself against its competitors, Northwest faces perhaps its greatest challenge, changing its corporate culture. Historically, Northwest was known to be the most adversarial carrier with respect to labor relations, always being the first to take a strike. While management has identified a sound course of action, changing the attitudes and behavior of 45,000 employees is not an insignificant task.

Northwest Airlines management has outlined a strategy to turn around the carrier from its current position of neutral to negative customer preference (depending on market) to one of positive preference. The success or failure of this strategy will determine the ultimate survival and future financial condition of Northwest Airlines and its place within the U.S. and world airline industry.

## **VII. Northwest Airlines Future Condition**

The future condition of Northwest Airlines will depend on three major elements; the degree of success in implementing its strategies; the evolving competitive environment; and external events.

### **Northwest's Strategies**

Northwest's strategic plans call for growth and improved profitability over the next five years as a result of a set of key actions. These proposed actions deal with a number of key factors. Northwest's strategies center about creating customer preference for the carrier. A number of proprietary and innovative improvements are planned to differentiate the carrier from its competitors. Northwest plans to continue to grow as appropriate situations present themselves, and is examining alliances and acquisitions on a number of fronts. The press has reported that "Northwest has kicked every tire in the industry" and the recent acquisitions of routes from Hawaiian, gates and slots from the Eastern bankruptcy estate and the new agreements with America West underscore management attention to potentially profitable expansion opportunities.

Other important elements of Northwest's strategy include further strengthening of its strategic alliance with KLM Royal Dutch Airlines, a major shareholder, improving profitability through both yields and costs, and paying off the LBO debt by 1995.

Several key elements are essential in executing these strategies, including, but not limited to, the cooperation of organized labor as fundamental changes are made in airline operating procedures, the ability of management to work as a team to implement cultural change, access to resources to allow a significant investment in the planned improvements and the time required for the changes to take hold.

### **Labor Relations**

Northwest's relationship with its labor unions has dramatically improved since the LBO, moving away from confrontational relationships. While labor-management relations must remain somewhat adversarial with respect to economic issues, current access to senior management and frequent discussions between management and labor are unprecedented at Northwest and reflect a change in corporate culture at the most senior level.

In the last year, Northwest's labor unions have been quite constructive. The Air Line Pilots Association suggested a program of flight operations efficiency improvements which were implemented. They also offered to provide an equity infusion to the carrier, if needed, during the of Gulf War crisis. Such events are encouraging, and indicate a willingness on the part of organized labor to participate in quality improvement programs and to implement the changes in service needed to turnaround the airline's image and ensure Northwest's survival as one of the "big 4" airlines.

## **Managing the Cultural Change**

Changing the work habits of 45,000 employees is a massive undertaking. Using similar transformations at SAS and British Airways as models, Northwest is working from the top down and the bottom up to implement behavioral and attitudinal change. A key element in the process will be middle management, who supervise day-to-day activities. An outside observer commented to us during our due diligence that "the gap between senior management and the old, heavy handed Northwest middle managers we deal with is immense". Northwest's ability to close that gap rapidly will be essential to its short-term financial success and long-term strategic position.

## **Investment in the Airline**

Northwest plans to continue to invest heavily in customer service improvements for the airline. A customer service training program in the fourth quarter of 1991 will cost \$9 million. Exhibit VII-1 highlights additional planned expenditures in customer service. Northwest plans to continue to upgrade its products and services. When combined with deliveries of additional new aircraft, as outlined in the fleet plan, this should help Northwest attain its customer preference objectives.

**Exhibit VII-1**  
**Northwest Airlines Planned Expenditures for Customer Service Improvements**

\$ in millions

	1991	1992	1993	1994	1995	Total
Area						
Additional Employee Payroll	26	72	80	88	97	363
Training	5	19	19	17	17	77
Other	24	71	73	49	51	268
<b>Total</b>	<b>55</b>	<b>162</b>	<b>172</b>	<b>154</b>	<b>165</b>	<b>708</b>

## **Timing of Results will have a Major Financial Impact**

The speed with which Northwest can improve customer preference, improve yields, reduce costs and improve quality will have a significant impact on its financial condition. Northwest's current plans call for aggressive product and marketing actions which, within two years, are expected to provide a significant improvement in performance. We believe

that a portion of the gains is attainable within that time frame, however, implementing a complete change of culture in an airline could require from five to ten years or longer.

Northwest is making major investments in improving its financial, planning and yield management capabilities. The degree to which these improvements pay off in the short term will determine the carrier's success over the next three years and beyond.

### **Northwest's Resources and Operations are being Repositioned for Future Growth**

A number of aspects of Northwest's operations are undergoing major change, upgrading and improvement in efforts to improve the profitability and financial position of the airline. These include the new management team, customer preference and quality programs, a re-orientation of marketing and distribution, improvements in operations, and a top-level focus on changing the corporate culture.

#### **Management Team**

The Northwest management team is new and qualified, although inexperienced in the industry and in working with each other. We are impressed with the credentials and knowledge of many of the new managers hired by Northwest. While several are unfamiliar with the industry and face a significant learning curve, most have significant service industry experience. The nucleus for a strong team has been assembled.

#### **Customer Preference and Quality Programs**

Northwest management has set a goal to become the most preferred carrier in the industry. This would be a dramatic turnaround in image, and will require a concerted effort. Within the last decade major image changes have been successfully accomplished by 2 major carriers, Scandinavian Airlines System, and British Airways. Each of these programs dramatically improved the financial performance of the carriers. Northwest is modeling its program on the best elements of each as well as adding its own proprietary innovations.

Today, Northwest is generally preference neutral in the United States (while its major competitors are positive) and neutral to slightly negative in the service intensive Asian markets. We believe that when the improvements Northwest plans are consistently implemented throughout its worldwide system, the carrier will improve its preference among consumers. Major elements of that program focus on on-time performance, new aircraft interiors, new meal services, new entertainment systems, new high density market shuttle services, and other innovative programs.

#### **Marketing and Distribution Re-Orientation**

With the selection of new leadership for the marketing and corporate communications functions, Northwest's external image is being re-oriented. A new advertising campaign, and a new "product focused" marketing organization are being created. Plans to upgrade

the skills of the marketing staff and the creation of an agency advisory council with the travel agency community should help as the company focuses on meeting the needs of both the end customer and its distributors.

### **Improvements in Operations**

Northwest's operations appear to be fundamentally sound, but there are opportunities for improvements in productivity and efficiency. ALPA is working with management to suggest improvements in flight operations. Airframe and engine maintenance operations, while constrained, continue to meet the needs of the carrier. Ground service enhancements and training are planned to provide a higher level of consistency in passenger service.

### **Changing Corporate Culture**

Northwest plans to change culture through a simultaneous top-down and bottom-up approach, using senior management leadership and lowest level employee training to implement change. Management estimates range from 18 months to 36 months or more to successfully re-orient the corporate culture of Northwest Airlines to a customer-focused organization.

### **Northwest's Current 5 Year Plan**

Exhibit VII-2 highlights projected revenues and earnings at the Wings Holdings Inc. level for the next five years. For competitive disclosure reasons, we have not provided the detailed assumptions behind these plans. Our assessment of the projections is that while they are aggressive and attainable, they present a "best case" scenario. Sensitivity analyses of the plans show that should the carrier fail to achieve its goals in yield by 1995, significantly lower earnings would result.

#### **Exhibit VII-2 Wings Holdings Inc. Highlights of Five Year Financial Plan**

\$ millions	1991	1992	1993	1994	1995
Projected Income Statement					
Operating Revenues	7,784	8,980	10,388	12,507	14,795
Operating Expenses	7,212	7,994	8,948	10,442	12,115
Income Contribution	571	986	1,440	2,065	2,681
Ownership Costs	976	1,057	1,210	1,473	1,702
Other Income/Expense	19	(18)	(4)	23	49
Earnings Before Taxes	(386)	(89)	227	615	1,027
Net Earnings	(253)	(60)	140	385	647



### Exhibit VII-3 Bankers Trust Debt Repayment Plans

\$ millions

	1991	1992	1993	1994	1995
Interest Rate		8.60%	9.80%	11.30%	12.30%
Interest Expense		119	115	81	25
Total Payments		(94)	(310)	(613)	(410)
Current Portion	94	310	613	410	0
Long-Term Portion	1333	1023	410	0	0
Year End Balance	1427	1333	1023	410	0

Northwest's current financial structure includes a number of significant liabilities at the Wings Holdings Inc. level, including the LBO debt, for which repayment plans are shown in Exhibit VII-3. Should financial performance not meet expectations, the company may need to restructure some of its obligations over a longer term. Because the company has a high percentage of owned aircraft, selling assets may be an alternative.

Another key to Northwest's future financial success lies improving capabilities in yield management. A small change in yield, as discussed earlier in this report, has a significant impact on earnings. An 8% improvement in yields in 1990 would have yielded \$510 million in increased revenues. Modern yield management systems can provide incremental increases in revenues of between 10-20% over conventional pricing, depending on their level of sophistication and the ability to accurately track and implement customer, booking and load information. Northwest is making significant investments in upgrading their existing yield management function which, if successful, could provide a significant improvement in earnings.

#### **Competitive Reactions will Impact Northwest's Financial Position**

Although competitive with American, Delta and United in many ways, Northwest lacks their financial strength due to its high debt load. Recent acquisitions by the "big 3", future aircraft deliveries, expense for aging aircraft and other expenditures will tend to increase debt at the major carriers at a faster rate than at Northwest (at least through 1993 as Northwest has no substantive LBO payment due nor significant influx of aircraft in 1992) placing upward pressure on prices. Should the other major airlines be able to increase prices significantly, the impact of this movement would be positive for Northwest.

A price war on transcontinental routes was begun last week by TWA, impacting industry yields and forcing most carriers to match the \$198 round-trip fare levels. With several carriers operating in Chapter 11 and others in economic difficulty, the potential for price cuts being made to increase traffic is significant until the restructuring of these carriers is completed. American, Delta and United are in positions of financial strength to withstand prolonged price wars (albeit at losses) which could place the remaining carriers, including Northwest, in some jeopardy. While we believe it would be unlikely, such pricing, the use of unpublished fares with major corporations in key Northwest cities and other competitive actions, in combination and for a long period, could have a deleterious impact on Northwest's financial condition.

### **External Events**

Unforeseen events seem to play a regular role in the airline industry. Since 1978, we have had the second Arab fuel crisis, deregulation by the U.S. government, the 1980 economic recession, the 1981 Air Traffic Controllers strike, noise regulation, and within the last five years, the stock market's 1987 black Monday, growing airport and airways congestion, Lockerbie and terrorism, the Aloha incident and resultant aging aircraft regulations, and the recent combined fuel price run-up, recession and Gulf War. It seems that every few years an external event reshapes the environment in which airlines operate.

Events such as a fuel crisis are particularly hard hitting, in that they rapidly increase airline costs and have a significant downward impact on the economy. When airlines attempt to recover additional costs by belatedly increasing prices, the demand elasticity impact further reduces demand and creates a downward spiral. In the last 5 years, the number of external events, including terrorism, maintenance issues, congestion, bankruptcies and a war combined to create a turbulent environment for the industry. We do not foresee a diminishing of turbulence in the near future, as deregulation in Europe, the opening of the Soviet Union, continued tension in the Middle East and a slowing of the Japanese economy could all significantly impact elements of the industry. Northwest's weaker balance sheet is likely to place it in a more vulnerable position than its larger competitors.

### **Key Factors for Northwest's Future Financial Success**

Northwest, given its current highly leveraged financial position, may not receive a second chance if its improvement program falters. For example, the result of the Gulf War, during which all airlines cut expenditures, was to delay Northwest's improvement efforts by six months. Northwest's future will depend on its ability to change its image with the traveling public from an "also ran" carrier to one which passengers "prefer" to fly. If the industry remains relatively calm, the prospects for Northwest meeting its objectives are reasonable. If a deep and prolonged fare war breaks out, or a fuel crisis occurs, Northwest may need to sell assets, restructure some of this debt load, or raise equity capital.

Major change presents a more difficult financial challenge to a highly leveraged company than for a company with financial depth. Additional capital, some of which would be provided by the proposed transactions, would reduce financial risk, making the company's success more likely.

### **Risk Factors for Northwest**

The major risks facing Northwest Airlines today are, to a great degree, beyond the control of Northwest management - the economic conditions of the industry in which they must operate, and the actions of their industry competitors. A sustained, or "double-dip" recession, in which traffic failed to return to normal levels, would provide an additional financial drain to Northwest which would force the carrier to draw down additional debt, push back capital expenditures, or obtain additional equity capital in order to continue its improvement program.

1992 and 1993 will be critical for Northwest. During this period, Northwest has minimal debt repayment requirements, few new aircraft deliveries to finance, and a good economic environment could provide an opportunity to rebuild financial strength. If management's strategies are successful, Northwest should be in a reasonable competitive position within the industry.

### **Northwest's Long-Term Prospects and Ability to Make Lease Payments**

The proposed thirty year life of the bonds is too long a period over which to predict the financial future of an airline. Pan American World Airways was the premier international flag carrier of the United States in 1961, and in a strong financial position. By 1991, thirty years later, it was in bankruptcy and had sold the majority of its international route structure.

Even in a worst case scenario, it appears clear to us that major portions of Northwest Airlines are likely to survive. Northwest has considerable value in its Asian routes, which, in a worst case, could be sold to a competitor or competitors. The implications of a worst case scenario on the utilization of the facilities in Duluth and Hibbing are impossible to predict.

On balance, our judgement is that Northwest Airlines is likely to survive, and be able to make lease payments on the proposed facilities.